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REPORT ID: **17283.01.T36.RP1**

North Kent Wind 1 LP – Turbine T36
IEC 61400-11 Edition 3.0 Measurement Report

Prepared for:

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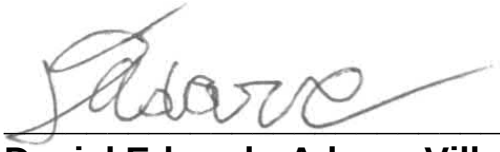
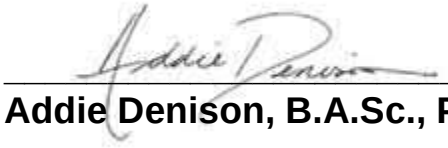


Daniel Eduardo Adarve Villanueva, B. Eng., E.I.T.



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19 July 2019 – Revision 2

Revision History

Revision Number	Description	Date
1	Issued test report	20 March 2019
2	Corrections to Microphone Distance, Figure B.1 and Table 1	19 July 2019

This report in its entirety, including appendices contains 106 pages.

Statement Qualifications and Limitations

This report was prepared by Aercoustics Engineering Limited in accordance with International Standard IEC 61400-11 (Edition 3.0, released 2012-11), "Wind turbine generator systems – Part 11: Acoustic noise measurement techniques". This report is specific only to the Wind Turbine identified in this report.

Aercoustics Engineering Limited shall not be responsible for any events or circumstances that may have occurred since the date on which the Wind Turbine was tested and/or this report was prepared, or for any inaccuracies contained in information that was provided to Aercoustics Engineering Limited. Further, Aercoustics Engineering Limited agrees that this report represents test data analysed as per the above described standard for the specific Wind Turbine described in this report, but Aercoustics Engineering Limited makes no other representations with respect to this report or any part thereof.

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This Statement of Qualifications and Limitations is attached to and forms part of this report.

Table of Contents

List of Appendices

List of Appendices (cont'd)

1 Introduction

Aercoustics Engineering Limited ("Aercoustics") was retained by North Kent Wind 1 LP to conduct testing per the IEC 61400-11 test standard on one of the wind turbines, designated as T36, located in the North Kent Wind 1 Project. The measurements were carried out in accordance with IEC 61400-11:2012, "*Wind turbine generator systems – Part 11: Acoustic noise measurement techniques*". This report is specific only to turbine T36.

Aercoustics is accredited by the Standards Council of Canada under ISO/IEC 17025 to perform testing according to the IEC 61400-11 test standard.

2 Wind Turbine Information

2.1 Wind Turbine Equipment Details

Equipment information specific to turbine T36 was provided by the manufacturer and is summarized in Tables 1 to 5.

Table 1 – Wind Turbine Details

Wind Turbine Details	
Manufacturer	Siemens Gamesa Renewable Energy
Model Number	SWT 2.772-113
Turbine ID	T36

Table 2 – Operating Details

Operating Details	
Vertical or Horizontal axis wind turbine	Horizontal
Upwind or downwind rotor	Upwind rotor
Hub height	99.5 m
Horizontal distance from rotor centre to tower axis	5.5 m
Diameter of rotor	113 m
Tower type (lattice or tube)	Tubular
Passive stall, active stall, or pitch controlled turbine	Pitch controlled turbine
Constant or variable speed	Variable speed
Power curve	Rev 0
Rotational speed at each integer standardised wind speed	Max speed, 13.2 rpm
Rated power output	2772 kW
Control software version	133.0.0.6

Table 3 – Rotor Details

Rotor Details	
Rotor control devices	Pitch control
Presence of aerodynamic add-ons, such as vortex generators, stall strips, serrated trailing edges, etc.	Vortex generators and Dinotails
Blade type	B55
Serial number	Blade A: 550275501 Blade B: 550276301 Blade C: 550274901
Number of blades	3

Table 4 – Gearbox Details

Gearbox Details	
Manufacturer	N/A Direct drive
Model number	N/A Direct drive
Serial number	N/A Direct drive

Table 5 – Generator Details

Generator Details	
Manufacturer	Siemens
Model number	DD22_02
Serial number	5100241526

2.2 Wind Turbine Location

Turbine T36 is located in the municipality of Chatham-Kent near the town of Chatham-Kent, approximately 805 m East of St. Clair Road, and 865 m South of Eberts Line. The area surrounding T36 is flat and consists primarily of farmland.

A general layout of the area in which the turbine is located is provided in the site plan (Figure A.01).

3 Measurement Details

3.1 Measurement Equipment

3.1.1 Acoustic Measurement Equipment

Details regarding the acoustic measurement equipment utilized for the test is summarized in Table 6.

Table 6 – Acoustic Measurement Equipment

Equipment	Manufacturer Name & Model	Serial Number
Acoustic Data acquisition system	SIEMENS SCR202	22163146
Microphone	B&K 4189	2625417
Pre-amplifier	B&K 2671	2614900
Acoustic calibrator	B&K 4231	3012380

A field calibration of the measurement chain was performed at the beginning and end of each measurement day.

3.1.2 Non-Acoustic Measurement Equipment

Non-acoustic measurement equipment includes an anemometer installed 10 meters above ground level ("10-m AGL") as well any sensing equipment utilized by the wind turbine to measure and record operational parameters. The 10-m AGL anemometer is provided by Aercoustics while the turbine sensing equipment is a part of the turbine installation.

Details regarding the non-acoustic measurement equipment utilized and controlled by Aercoustics is summarized in Table 7. Equipment used to measure turbine parameters, such as yaw angle and power output, are outside of Aercoustics' control and are not reported here.

Table 7 – Meteorological Measurement Equipment

Equipment	Manufacturer Name & Model	Serial Number
Anemometer	VAISALA WXT520	G4420002
Serial to Analog Converter	NOKEVAL 7470	A159784

3.2 Measurement Setup

3.2.1 Microphone Placement

The measurement microphone was setup 156 meters from the base of the turbine in a downwind position (Position 1, per IEC 61400-11), at an elevation of 0 meters relative to the base of T36. The slant distance (R_1) from microphone location to rotor centre includes

the distance from rotor center to tower axis (R_1 = 189.7 m). The microphone was placed in the centre of a circular, acoustically reflective board.

During the measurement period, data points were used only when the microphone was within 15 degrees of the downwind direction from the turbine. The microphone position relative to downwind is monitored via the turbine yaw angle provided from the turbine SCADA system (discussed further in Section 3.5).

During the test, the land surrounding the turbine was a plowed field. No crops or vegetation were in the nearby area which would influence the results of the measurement. There were no nearby reflecting surfaces (houses, barns etc.); as such the influence from reflecting surfaces is negligible.

Photos of the measurement setup are provided in Figure A.02, Appendix A.

3.2.2 Double Windscreen Setup

A double windscreen setup was utilized for the first measurement day on November 28, 2019. Documentation of how the secondary windscreen affects the overall sound pressure level and 1/3 Octave Band spectrum in comparison to a single windscreen setup is provided in Appendix C.

The secondary windscreen used meets the performance criterion specified in Annex E (Characterization of a secondary wind screen) of IEC-61400-11:2012.

3.3 Measurement Periods

Table 8 – Summary of Measurement Periods

Date	Test Type	Start Time	Finish time
November 28, 2018	Turbine ON	1:18 PM	2:01 PM
	Background	2:02 PM	2:35 PM
	Turbine ON	2:42 PM	3:26 PM
	Background	3:26 PM	3:58 PM
January 9, 2019	Turbine ON	11:32AM	12:03 PM
	Background	12:06 PM	12:36 PM
	Turbine ON	12:43 PM	1:45 PM
	Background	1:48PM	2:11PM
	Turbine ON	2:17PM	2:30PM
	Background	2:32PM	3:25PM

3.4 Meteorological Conditions

The normalised hub height wind speed during Turbine ON periods is either derived directly using the turbine power curve and measured power output (Section 8.2.1.1 of [1]) or indirectly using the measured wind speed from the nacelle anemometer and applying a correction factor (Section 8.2.1.2 of [1]). Wind speeds during Background periods are measured using the 10-m AGL anemometer and corrected to hub-height using a

correction factor (Section 8.2.2 of [1]). The downwind direction is determined using the turbine yaw angle output, also known as the nacelle position (Section 8.3 of [1]).

Other atmospheric conditions, including ambient temperature and atmospheric pressure, are measured by the 10-m AGL anemometer during the measurement periods.

Detailed meteorological data relevant to the measurement is provided in Appendix E.

3.5 Turbine operational information

Turbine operational parameters – including electrical power, nacelle position (yaw angle), rotational speed, and nacelle wind speed – are acquired from the turbine controller simultaneously with the acoustic and weather measurement data using Aercoustics' data acquisition system.

4 Measurement Results

4.1 Deviations from IEC-61400-11 Edition 3.0

No deviations.

4.2 Special Notes & Considerations

No adjacent turbines were parked during the test.

4.3 Analysis Methodology

The following section outlines any corrections applied to the acoustic or weather measurement data, per IEC 61400-11. Transient events, such as vehicle traffic, wildlife, or air traffic, are excluded from the measurement data set.

4.3.1 Double Windscreen Adjustment

As previously mentioned, a double wind screen was used, as such; the measurement data was adjusted on a per-data-point basis, as appropriate, to account for its influence. All 1/3 Octave Band spectrum and overall level data presented in this report is based on data that has been adjusted appropriately for the influence of the secondary wind screen.

FFT spectral data used for the tonality assessment was not adjusted. However, it should be noted that the effect of the windscreen on the tonality assessment is considered to be negligible.

No double wind screen was utilized for the second measurement run, as such the measurement data did not require adjustment.

4.3.2 Wind Speed Correction

Following the methodology described in Section 8.2 of [1] and summarized in Section 0 of this report, two correction factors are derived from the measurement data and used to

determine the normalized hub-height wind speed in certain conditions. The first correction factor (k_nac) is used to correct nacelle wind speeds measured for intervals that fall outside of the allowable power curve range. The second correction factor (k_Z) is used to correct 10m-AGL wind speeds measured during Background measurement periods up to hub-height.

The k-factors for this measurement set are provided in Table 9.

Table 9 – Calculated nacelle anemometer (k_nac) and 10m (k_Z) wind speed k-factor

k_nac	k_Z
0.97	1.20

4.4 Type B uncertainties

Type B uncertainties were obtained through interpretation of the information provided in Annex C of [1]. A summary of Type B uncertainties is provided in Table 10, while detailed information, including uncertainties by 1/3 octave band, is provided in Appendix C.

Table 10 – Summary of Type B uncertainties

Component	Typical (dB)	Used (dB)
Calibration	0.2	0.2
Board	0.3	0.3
Distance & direction	0.1	0.1
Air absorption	0	0
Weather conditions	0.5	0.5
Wind speed measured	0.7	0.7
Wind speed derived	0.2	0.2
Wind speed from power curve	0.2	0.2

4.5 Sound Pressure Level Measurements

Average overall sound pressure levels in each wind bin for Turbine ON and Background periods are summarized in Table 11. Average sound levels and uncertainties by 1/3 octave band are provided in Appendix C. A copy of the measurement data used for analysis is provided in Appendix E.

Table 11 – Summary of Sound Pressure Level Measurements

Wind Speed (m/s)	Turbine ON		Background		Turbine ON, Background adjusted L_{eq}, (dBA)
	L_{eq}, (dBA)	# of data pts	L_{eq}, (dBA)	# of data pts	
7.5	51.1	26	39.6	67	50.8
8	52.6	31	41.0	68	52.3
8.5	53.1	57	41.9	52	52.8
9	53.2	75	42.9	75	52.8
9.5	53.3	110	44.4	78	52.7
10	53.1	82	44.5	67	52.5
10.5	53.1	108	44.7	86	52.5
11	52.9	105	46.0	66	52.1
11.5	52.8	90	46.2	52	51.8
12	52.8	57	46.3	53	51.8
12.5	52.6	31	46.0	46	51.6

4.6 Sound Power Level of Turbine

The calculated apparent sound power level at hub height is summarized in Table 12. Corresponding sound power levels for 10-meter height wind speeds are provided in Table 13. Wind speeds at 10 meters are calculated using the wind shear profile described in Section 9.4 of [1]. Sound power levels by 1/3 octave band are provided in Appendix C.

Table 12 – $L_{WA,\,K}$ at each integer wind speed

Wind Speed (m/s)	Apparent L_{WA}, (dBA)	Uncertainty (dB)
7.5	101.4	0.8
8	102.9	0.7
8.5	103.3	0.8
9	103.3	0.9
9.5	103.2	0.9
10	103.1	0.9
10.5	103.0	0.9
11	102.6	1.0
11.5	102.4	1.0
12	102.4	1.0
12.5	102.1	1.0

Table 13 – $L_{WA\ 10m,\,K}$ at each integer wind speed

Wind Speed (m/s)	Apparent L_{WA}, (dBA)	Uncertainty (dB)
5	100.6	1.0
6	103.1	0.8
7	103.1	0.9
8	102.5	0.9
9	102.4	1.2

4.7 Tonality Analysis

The tonality analysis for turbine T36 is summarized in Table 14, while plots of narrow band spectra at each wind speed are provided in Appendix D. All ΔL_{tn} and ΔL_a values reported represent the energy average of all data points with an identified tone that fall within the same frequency of origin (Section 9.5.8 of [1]).

The narrow band spectra provided in the plots represents an energy average of all data points in the given wind speed bin for both Turbine ON and Background.

Table 14 – Tonality Assessment Summary

Wind Speed (m/s)	Frequency (Hz)	Tonality, ΔL_{tn} (dB)	Tonal audibility, ΔL_a (dB)	FFT's with tones	Total # of FFT's	Presence (%)
7.5	64	-4.7	-2.7	25	26	96%
8	71	-2.0	0.0	28	31	90%
8.5	70	-1.9	0.1	57	57	100%
9	70	-1.2	0.8	74	75	99%
9.5	70	-1.7	0.3	104	110	95%
10	68	-3.2	-1.2	68	82	83%
10.5	66	-3.8	-1.8	68	108	63%
11	66	-4.2	-2.2	82	105	78%

5 Closure

Measurements and analyses per IEC 61400-11:2012 (Edition 3.0) were performed on turbine T36 of the North Kent Wind 1 Project, located in the municipality of Chatham-Kent, Ontario. The test turbine was found to have a maximum apparent sound power level of 103.3 dBA and a maximum tonal audibility of 0.8 dB.

Supplementary information to address specific local regulatory requirements are attached separately in Appendix F.

Should you have any questions or comments please contact the authors of this report.

6 References

[1] IEC 61400-11 , *Wind Turbines - Part 11: Acoustic noise measurement techniques,* International Electrotechnical Commission, 2012.

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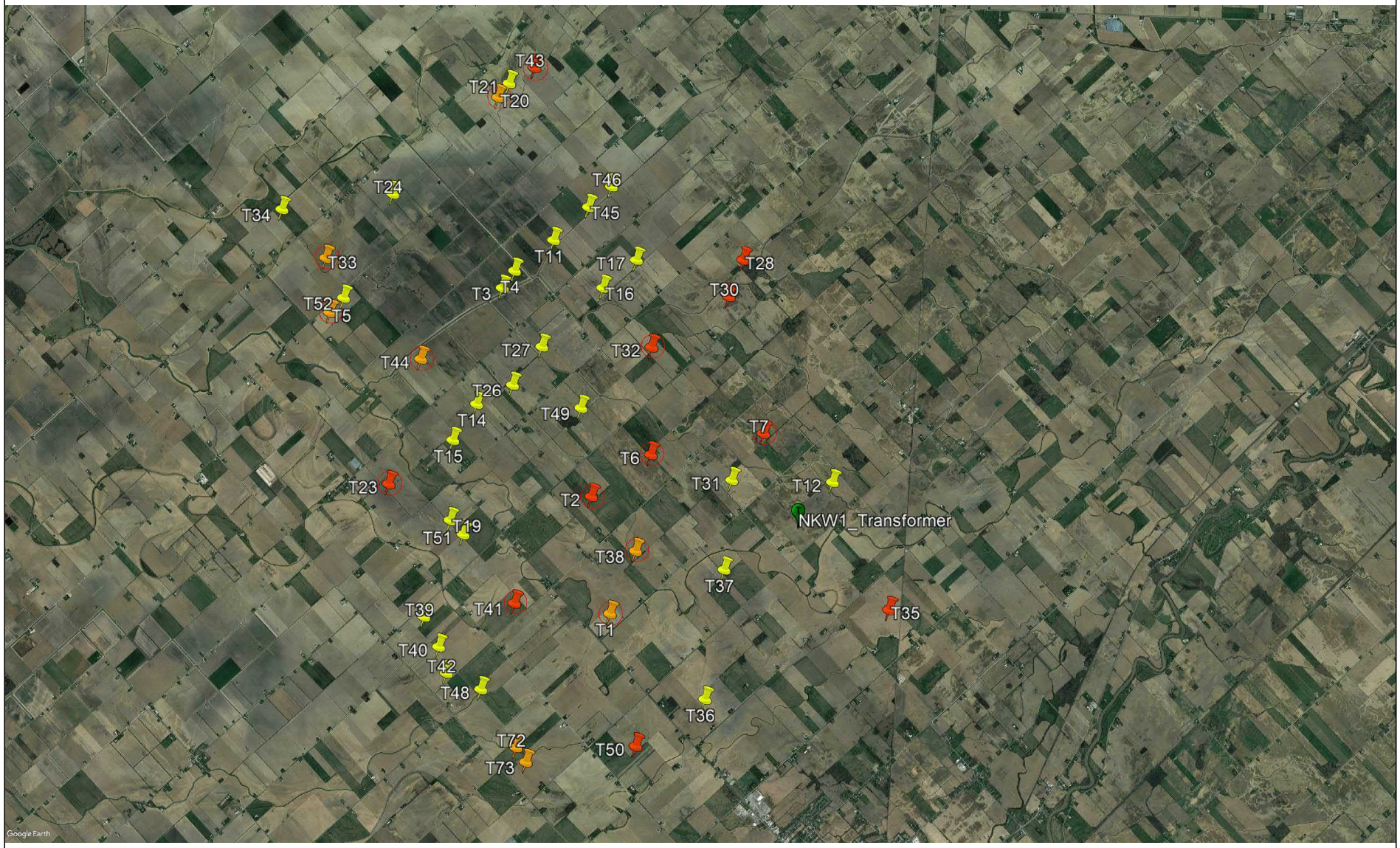
Appendix A
Site Details



aercoustics	170283.01.T36.RP2	**Project Name**
	Scale: NTS Drawn by: DEA Reviewed by: MAD Date: Feb 2019 Revision: 1	North Kent Wind Power Project - IEC 61400-11 Edition 3.0 - Turbine T36
		Figure Title Site Plan
		Figure A.01

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17283.01.T36.RP2	
Scale: NTS	
Drawn by: DEA	
Reviewed by: MAD	
Date: Feb 2019	
Revision: 1	

Project Name

North Kent Wind Power Project - IEC 61400-11 Edition 3.0 - Turbine T36

Figure Title

Site Photo

Figure A.02

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Appendix B
Turbine Information

Table B.01 Allowed range of power curve and required wind speeds

Project: North Kent Wind Power Project - Turbine T36 - IEC 61400-11 Measurement
Report ID: 17283.01.T36.RP2

Created on: 2/21/2019

Power Curve & Required Wind Speeds		
Power Curve Tolerance	3%	
Acceptable range min	4	m/s
Acceptable range max	10	m/s
Min allowable range	4	m/s
Max allowable range	10	m/s
Power Output	2772	kW
85% Power	2356.2	kW
Corresponding wind speed	9.64	m/s
Minimum bin	7.5	m/s
Maximum bin	12.5	m/s

Power Curve (+ value = acceptable)		
Hub Wind Speed (m/s)	Power [kW]	Slope of Power Curve
0	**0**	-166.32
1	0	-166.32
2	0	-104.32
3	62	-61.32
4	167	11.68
5	345	102.68
6	614	209.68
7	990	324.68
8	1481	403.68
9	2051	312.68
10	2530	30.68
11	2727	-125.32
12	2768	-162.32
13	2772	-166.32
14	2772	-166.32
15	2772	-166.32
16	2772	-166.32
17	2772	-166.32
18	2772	-166.32
19	2772	-166.32
20	2772	-166.32
21	2772	-166.32
22	2772	-193.32
23	2745	-194.32
24	2717	-419.32
25	2464	

Hub Wind Speed (m/s)	Electrical Power (kW)
0	0
1	0
2	0
3	62
4	167
5	345
6	614
7	990
8	1481
9	2051
10	2530
11	2727
12	2768
13	2772
14	2772
15	2772
16	2772
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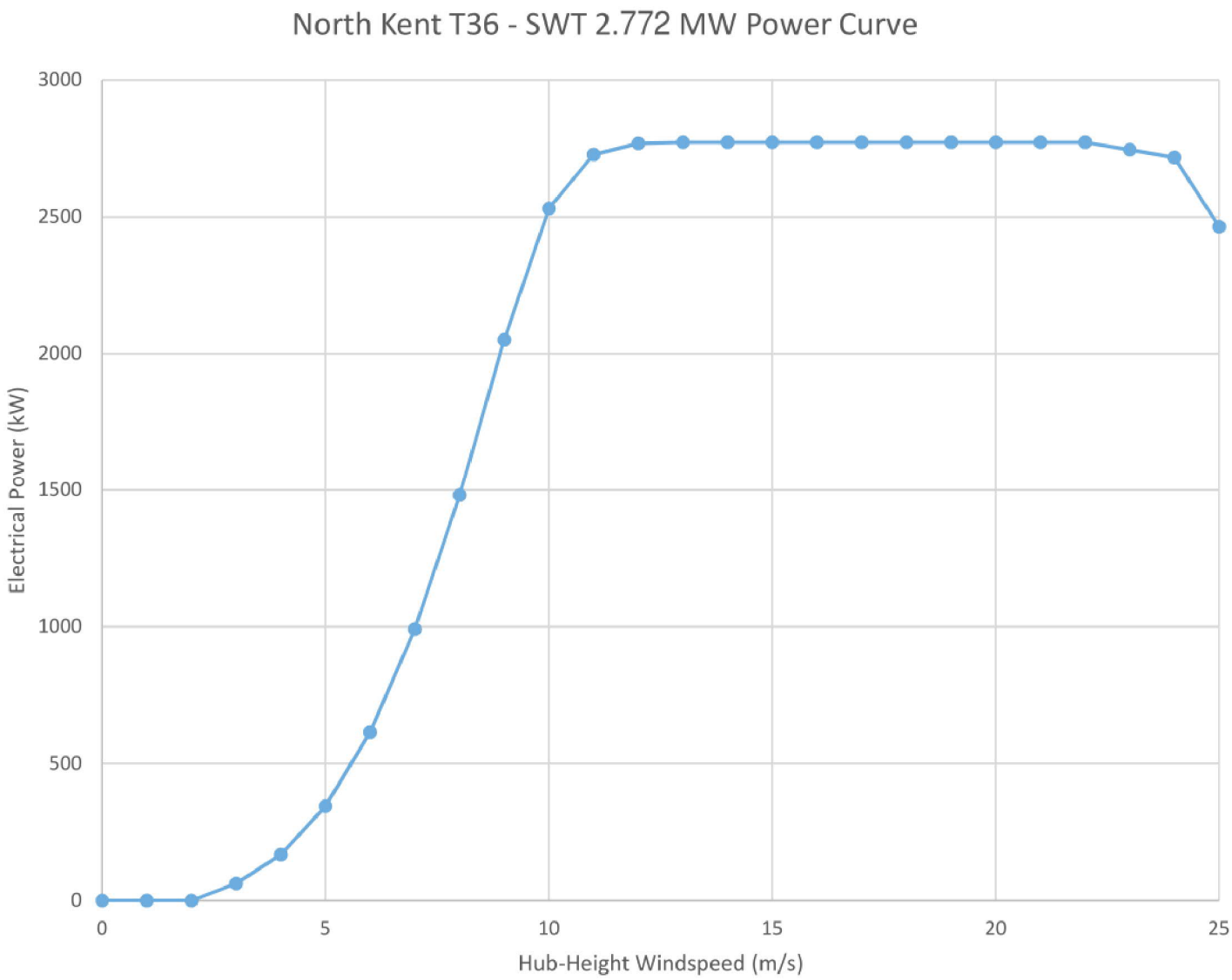
18	2772
19	2772
20	2772
21	2772
22	2772
23	2745
24	2717
25	2464



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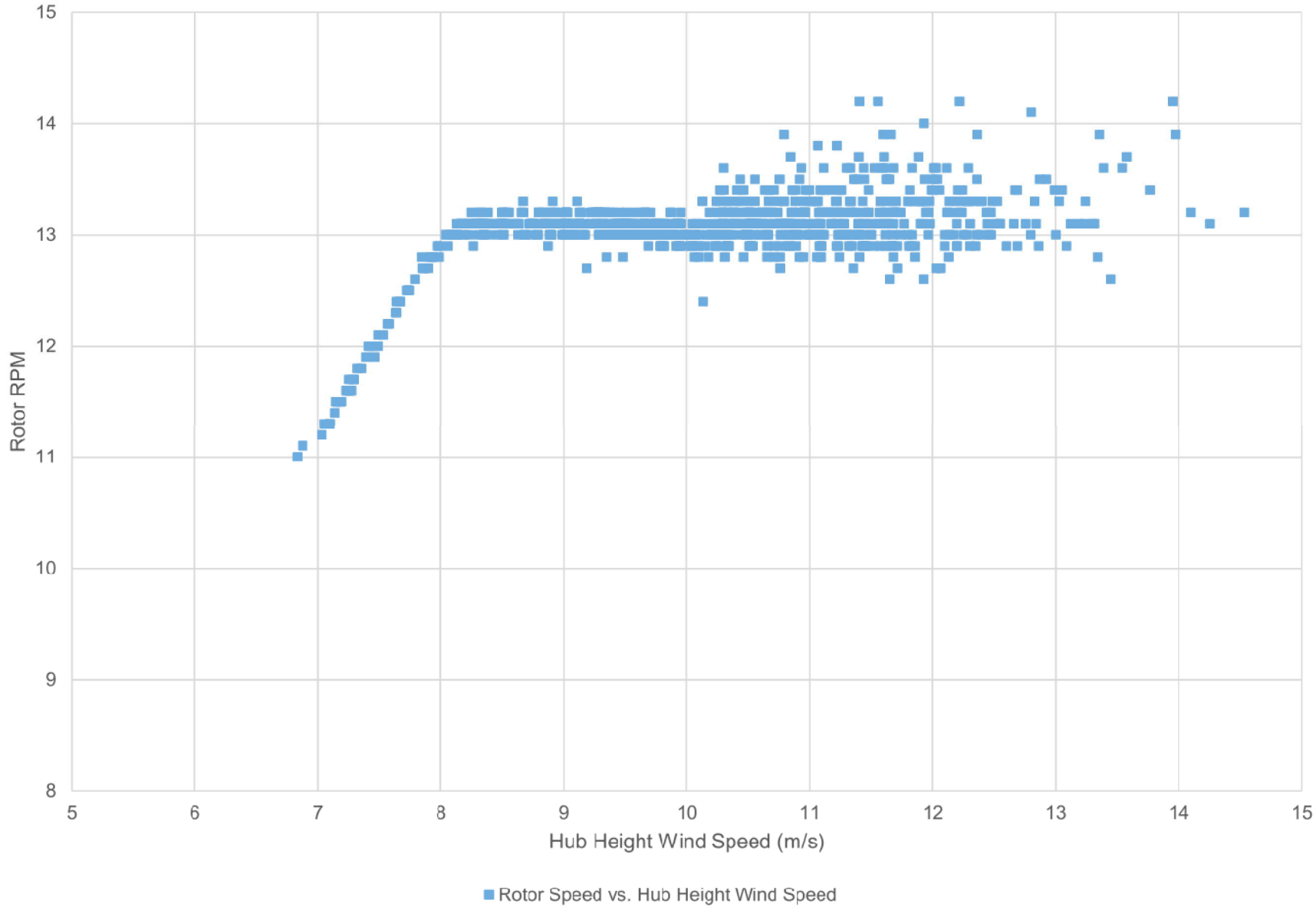
17283.01.T36.RP1	**Project Name**
Scale: NTS Drawn by: DEA Reviewed by: MAD Date: July 2019 Revision: 1	North Kent Wind 1 LP - IEC 61400-11 Edition 3.0 - Turbine T36
	Figure Title Power Curve

Figure B.01



aercoustics	17283.01.T36.RP2 Scale: NTS Drawn by: DEA Reviewed by: MAD Date: Feb 2019 Revision: 1	**Project Name** North Kent Wind Power Project - IEC 61400-11 Edition 3.0 - Turbine T36 **Figure Title** Rotor RPM vs. Wind Speed

Figure B.02

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Appendix C
Apparent Sound Power Level

Table C.01 Detailed apparent sound power level data at hub height

Project: North Kent Wind Farm - Turbine T36 - IEC 61400-11 Measurement
Report ID: 172831.01.T36.RP2

Created on: 2/22/2019

1/3 Octave values marked with brackets [ ] denote less than 3 dB difference between Turbine ON and Background
Overall levels marked with an asterisk * denote 3 to 6 dB difference between Turbine ON and Background, while Overall values with less than 3 dB difference between Turbine ON and Background are not reported

Wind Bin (m/s)	Parameter	1/3 Octave Band (Hz)																													Overall
		20	25	31.5	40	50	63	80	100	125	160	200	250	315	400	500	630	800	1000	1250	1600	2000	2500	3150	4000	5000	6300	8000	10000	
7.5	Turbine ON (dBA)	8.5	12.5	16.6	22.1	24.3	32.2	29.4	30.7	32.1	32.5	36.5	37.2	36.5	38.5	40.4	41.5	42.1	41.3	41.3	39.8	39.7	39.8	33.2	29.0	24.8	18.9	11.5	7.8	51.1
	Background (dBA)	8.6	11.5	13.8	16.8	19.6	22.6	22.7	23.0	23.4	24.3	25.7	26.1	26.3	26.6	27.0	29.5	30.5	30.2	31.1	29.5	25.0	20.7	17.4	14.5	12.3	11.4	10.8	8.3	39.6
	Turbine ON - background adj (dBA)	5.5	9.5	13.6	20.5	22.4	31.7	28.3	29.9	31.5	31.7	36.2	36.8	36.1	38.2	40.2	41.3	41.8	41.0	40.9	39.4	39.6	39.8	33.1	28.9	24.5	18.0	8.5	4.8	50.8
	Signal to noise (dB)	-0.1	0.9	2.9	5.3	4.6	9.5	6.7	7.8	8.7	8.1	10.9	11.1	10.3	11.9	13.4	12.0	11.6	11.1	10.2	10.4	14.7	19.1	15.8	14.5	12.5	7.4	0.7	-0.5	11.5
	Uncertainty (dB)	4.5	3.8	2.5	2.3	1.7	1.1	1.1	1.0	1.0	1.0	0.8	0.8	0.8	0.8	0.7	0.8	0.7	0.8	0.9	0.9	0.7	0.9	1.1	1.1	1.0	1.3	3.0	3.7	0.8
	PWL (dBA)	56.0	60.0	64.2	71.1	73.0	82.2	78.9	80.5	82.0	82.3	86.7	87.4	86.7	88.7	90.7	91.8	92.4	91.5	91.5	90.0	90.1	90.3	83.7	79.4	75.1	68.5	59.0	55.4	101.4
8.0	Turbine ON (dBA)	10.7	14.7	18.6	22.4	25.7	33.1	33.6	32.1	33.0	34.3	37.9	38.6	38.2	40.1	42.0	43.0	43.6	43.0	42.7	41.2	40.0	41.8	36.4	30.3	26.3	20.6	13.5	9.7	52.6
	Background (dBA)	11.1	14.3	17.4	19.2	21.3	24.3	24.9	25.3	25.8	26.3	27.4	28.1	28.5	28.6	28.5	30.2	31.1	30.7	32.3	30.7	25.7	21.8	18.7	15.9	13.7	12.4	11.6	9.1	41.0
	Turbine ON - background adj (dBA)	7.7	11.7	15.6	19.5	23.8	32.5	33.0	31.1	32.1	33.6	37.5	38.2	37.7	39.8	41.8	42.8	43.4	42.7	42.3	40.8	39.8	41.8	36.3	30.2	26.1	19.9	10.5	6.7	52.3
	Signal to noise (dB)	-0.4	0.4	1.2	3.2	4.4	8.8	8.7	6.8	7.2	8.1	10.5	10.5	9.7	11.5	13.4	12.8	12.5	12.2	10.4	10.5	14.2	20.0	17.7	14.4	12.6	8.2	2.0	0.5	11.7
	Uncertainty (dB)	4.4	3.7	2.6	3.1	1.7	1.0	0.9	1.0	1.0	0.9	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.8	0.8	0.7	0.8	1.0	1.0	1.0	1.2	2.9	3.6	0.7
	PWL (dBA)	58.3	62.3	66.1	70.1	74.3	83.1	83.5	81.6	82.7	84.2	88.1	88.8	88.3	90.3	92.3	93.3	93.9	93.3	92.9	91.3	90.3	92.3	86.8	80.7	76.6	70.4	61.1	57.2	102.9
8.5	Turbine ON (dBA)	11.4	15.7	19.1	22.7	26.1	33.0	34.5	32.4	33.5	35.1	38.3	39.1	38.7	40.7	42.3	43.4	43.9	43.4	43.2	41.6	40.2	42.5	37.6	30.7	26.8	21.2	14.8	11.1	53.1
	Background (dBA)	13.3	17.4	19.7	21.8	23.7	26.7	28.2	27.4	27.6	29.0	29.9	30.5	30.6	30.4	30.0	30.7	30.9	30.5	30.7	29.0	26.3	24.1	21.5	18.8	18.1	14.8	13.7	11.0	41.9
	Turbine ON - background adj (dBA)	8.4	12.7	16.1	19.7	23.1	31.8	33.4	30.7	32.2	33.9	37.7	38.4	38.0	40.3	42.1	43.2	43.7	43.2	43.0	41.3	40.0	42.4	37.5	30.4	26.2	20.0	11.8	8.1	52.8
	Signal to noise (dB)	-1.9	-1.7	-0.6	0.8	2.4	6.3	6.3	5.0	5.9	6.2	8.5	8.6	8.1	10.4	12.3	12.7	13.1	12.9	12.6	12.5	13.9	18.4	16.2	11.9	8.7	6.3	1.1	0.1	11.2
	Uncertainty (dB)	4.7	4.0	2.8	3.6	2.5	1.3	1.1	1.3	1.2	1.2	0.8	0.8	0.8	0.8	0.7	0.7	0.7	0.8	0.8	0.8	0.7	0.8	1.0	1.1	1.1	1.4	3.0	3.7	0.8
	PWL (dBA)	59.0	63.3	66.7	70.2	73.6	82.4	83.9	81.3	82.7	84.5	88.2	89.0	88.6	90.9	92.6	93.7	94.3	93.8	93.5	91.9	90.6	93.0	88.1	81.0	76.7	70.6	62.4	58.6	103.3
9.0	Turbine ON (dBA)	13.3	17.1	20.4	23.4	26.8	33.6	35.0	32.9	34.2	35.9	38.7	39.4	39.1	41.0	42.4	43.3	43.8	43.5	43.1	41.5	40.3	42.9	38.0	30.8	26.9	21.2	15.4	11.7	53.2
	Background (dBA)	15.0	18.3	20.6	22.8	24.8	27.0	28.2	29.3	30.2	30.2	31.3	31.9	32.1	31.9	31.2	31.3	32.2	31.0	30.9	30.2	25.7	21.8	19.2	17.0	15.6	14.0	13.4	10.7	42.9
	Turbine ON - background adj (dBA)	10.3	14.1	17.4	20.4	23.8	32.5	34.0	30.5	32.1	34.5	37.9	38.6	38.1	40.4	42.1	43.0	43.5	43.2	42.8	41.1	40.1	42.9	38.0	30.6	26.6	20.3	12.4	8.7	52.8
	Signal to noise (dB)	-1.7	-1.2	-0.3	0.6	2.0	6.6	6.9	3.7	4.1	5.6	7.4	7.5	7.0	9.0	11.2	12.0	11.6	12.5	12.2	11.3	14.6	21.1	18.9	13.8	11.4	7.2	2.0	1.0	10.3
	Uncertainty (dB)	4.9	4.1	2.8	3.7	2.6	1.3	1.1	1.8	1.7	1.3	0.9	0.9	0.9	0.8	0.8	0.8	0.8	0.8	0.9	0.8	0.7	0.8	1.1	1.1	1.1	1.4	3.1	3.9	0.9
	PWL (dBA)	60.9	64.7	67.9	70.9	74.4	83.0	84.6	81.0	82.6	85.0	88.4	89.1	88.7	90.9	92.7	93.5	94.0	93.8	93.3	91.7	90.7	93.4	88.5	81.2	77.2	70.9	63.0	59.2	103.3
9.5	Turbine ON (dBA)	14.7	18.6	21.0	23.9	27.0	33.4	34.7	33.0	34.7	36.2	39.0	39.6	39.2	41.1	42.4	43.2	43.7	43.3	42.9	41.4	40.4	43.3	38.3	31.3	27.7	23.1	21.2	19.7	53.3
	Background (dBA)	17.1	20.2	22.5	24.7	27.0	29.7	30.3	31.4	33.1	32.3	33.4	34.1	34.2	33.8	33.1	32.4	31.9	31.0	31.0	29.3	26.0	23.1	20.7	18.6	17.8	15.5	14.5	11.8	44.4
	Turbine ON - background adj (dBA)	11.7	15.6	18.0	20.9	24.0	31.0	32.8	30.0	31.7	33.9	37.6	38.2	37.6	40.1	41.9	42.8	43.4	43.1	42.6	41.1	40.2	43.3	38.2	31.1	27.3	22.2	20.2	19.0	52.7
	Signal to noise (dB)	-2.4	-1.7	-1.6	-0.8	-0.1	3.7	4.4	1.6	1.5	3.9	5.6	5.5	5.0	7.2	9.4	10.8	11.8	12.4	11.9	12.1	14.4	20.2	17.7	12.8	10.0	7.5	6.8	7.9	8.8
	Uncertainty (dB)	4.8	4.0	2.7	3.6	2.6	1.9	1.4	2.1	2.2	1.7	1.1	1.1	1.2	0.9	0.8	0.8	0.7	0.8	0.9	0.8	0.7	0.8	1.1	1.1	1.1	1.3	1.9	2.3	0.9
	PWL (dBA)	62.3	66.1	68.5	71.4	74.5	81.5	83.4	80.6	82.2	84.5	88.2	88.7	88.1	90.7	92.4	93.4	94.0	93.6	93.2	91.7	90.8	93.8	88.8	81.7	77.8	72.8	70.8	69.5	103.2
10.0	Turbine ON (dBA)	15.6	19.7	22.4	24.9	27.8	33.4	34.0	33.6	35.1	36.4	39.0	39.6	39.3	41.0	42.2	42.9	43.4	43.2	42.7	41.3	40.3	43.4	38.2	31.3	27.8	23.5	22.1	20.8	53.1
	Background (dBA)	17.1	20.6	22.9	25.0	27.1	29.2	30.1	30.7	31.8	32.8	33.6	34.2	34.4	34.1	33.5	32.7	32.1	31.2	30.9	29.9	27.4	23.6	21.5	19.7	18.5	17.1	16.7	14.6	44.5
	Turbine ON - background adj (dBA)	12.6	16.7	19.4	21.9	24.8	31.3	31.8	30.6	32.4	34.0	37.6	38.1	37.6	40.0	41.6	42.4	43.1	42.9	42.4	41.0	40.1	43.3	38.1	31.0	27.3	22.3	20.7	19.6	52.5
	Signal to noise (dB)	-1.4	-0.9	-0.4	-0.1	0.6	4.2	3.9	2.8	3.3	3.7	5.4	5.4	4.9	6.9	8.8	10.1	11.3	12.0	11.7	11.4	13.0	19.7	16.7	11.6	9.3	6.4	5.4	6.2	8.6
	Uncertainty (dB)	4.6	3.9	2.8	3.5	2.5	1.6	1.6	2.1	1.9	1.8	1.1	1.1	1.2	0.9	0.8	0.8	0.7	0.8	0.8	0.8	0.7	0.8	1.0	1.1	1.1	1.4	2.1	2.5	0.9
	PWL (dBA)	63.2	67.3	70.0	72.5	75.3	81.9	82.3	81.1	83.0	84.6	88.1	88.7	88.2	90.6	92.2	93.0	93.6	93.4	92.9	91.5	90.6	93.9	88.6	81.6	77.8	72.9	71.2	70.2	103.1

Table C.01 Detailed apparent sound power level data at hub height

Project: North Kent Wind Farm - Turbine T36 - IEC 61400-11 Measurement
Report ID: 172831.01.T36.RP2

Created on: 2/22/2019

1/3 Octave values marked with brackets [ ] denote less than 3 dB difference between Turbine ON and Background
Overall levels marked with an asterisk * denote 3 to 6 dB difference between Turbine ON and Background, while Overall values with less than 3 dB difference between Turbine ON and Background are not reported

Wind Bin (m/s)	Parameter	1/3 Octave Band (Hz)																													Overall
		20	25	31.5	40	50	63	80	100	125	160	200	250	315	400	500	630	800	1000	1250	1600	2000	2500	3150	4000	5000	6300	8000	10000	
10.5	Turbine ON (dBA)	16.7	20.9	22.9	25.4	28.1	32.7	33.7	33.4	34.7	36.0	38.6	39.2	39.1	40.8	42.1	42.8	43.4	43.3	42.7	41.4	40.2	43.4	38.7	31.4	28.1	24.5	23.9	22.7		53.1
	Background (dBA)	17.9	21.1	23.3	25.4	27.6	29.8	30.9	31.3	32.0	33.2	34.2	34.9	35.0	34.7	33.7	32.7	31.7	30.7	29.2	27.9	26.1	23.4	21.1	19.3	18.4	16.5	15.8	12.9		44.7
	Turbine ON - background adj (dBA)	13.7	17.9	19.9	22.4	25.1	29.7	30.7	30.4	31.7	33.0	36.6	37.2	37.0	39.6	41.4	42.4	43.1	43.1	42.5	41.2	40.1	43.3	38.6	31.2	27.6	23.8	23.1	22.3		52.5
	Signal to noise (dB)	-1.3	-0.2	-0.4	0.0	0.5	3.0	2.8	2.2	2.7	2.9	4.4	4.4	4.1	6.1	8.4	10.2	11.8	12.6	13.5	13.5	14.2	20.0	17.6	12.1	9.7	8.0	8.1	9.8		8.4
	Uncertainty (dB)	4.6	3.8	2.7	3.5	2.5	2.2	2.0	2.0	2.0	2.0	1.2	1.3	1.3	1.0	0.8	0.8	0.7	0.8	0.8	0.8	0.7	0.8	1.1	1.1	1.1	1.3	1.8	2.2		0.9
	PWL (dBA)	64.2	68.4	70.4	73.0	75.7	80.3	81.2	81.0	82.3	83.6	87.2	87.8	87.6	90.2	91.9	93.0	93.7	93.6	93.1	91.7	90.6	93.9	89.2	81.7	78.1	74.3	73.7	72.8		103.0
11.0	Turbine ON (dBA)	17.9	21.6	23.7	26.3	28.9	33.3	34.2	34.0	35.1	36.3	38.5	39.2	39.3	40.8	41.7	42.4	43.1	43.2	42.7	41.4	40.2	42.8	38.2	31.0	27.4	23.1	21.1	19.2		52.9
	Background (dBA)	19.6	22.8	24.9	27.2	29.1	30.9	32.2	32.7	33.6	34.6	35.7	36.3	36.5	36.0	35.1	34.0	32.7	31.3	29.1	27.5	25.6	23.6	21.4	19.8	18.9	16.9	16.2	13.4		46.0
	Turbine ON - background adj (dBA)	14.9	18.6	20.7	23.3	25.9	30.3	31.2	31.0	32.1	33.3	35.5	36.2	36.3	39.0	40.7	41.8	42.7	42.9	42.5	41.2	40.1	42.7	38.1	30.6	26.7	22.0	19.4	17.9		52.1
	Signal to noise (dB)	-1.7	-1.1	-1.2	-0.9	-0.2	2.3	2.1	1.3	1.6	1.7	2.8	2.9	2.9	4.7	6.6	8.5	10.5	11.9	13.6	13.9	14.7	19.2	16.8	11.2	8.5	6.3	4.9	5.8		7.0
	Uncertainty (dB)	4.7	3.8	2.7	3.6	2.5	2.2	2.0	2.0	2.0	2.0	1.7	1.7	1.7	1.2	0.9	0.9	0.8	0.8	0.8	0.8	0.7	0.8	1.1	1.2	1.2	1.5	2.2	2.5		1.0
	PWL (dBA)	65.4	69.2	71.3	73.9	76.4	80.8	81.8	81.5	82.7	83.9	86.1	86.8	86.9	89.6	91.2	92.3	93.3	93.5	93.0	91.8	90.6	93.3	88.7	81.2	77.3	72.5	69.9	68.5		102.6
11.5	Turbine ON (dBA)	20.0	24.1	26.2	28.3	30.6	34.2	35.3	35.0	36.2	37.3	38.9	39.8	40.1	41.0	41.5	41.8	42.5	42.8	42.4	41.3	39.9	42.0	37.6	30.0	26.1	21.4	19.5	16.7		52.8
	Background (dBA)	19.3	22.8	25.1	27.1	29.2	31.1	32.3	32.9	33.6	34.9	35.9	36.5	36.7	36.2	35.4	34.3	32.9	31.6	29.4	27.8	26.0	24.1	22.0	20.5	19.5	17.6	16.8	14.0		46.2
	Turbine ON - background adj (dBA)	17.0	21.1	23.2	25.3	27.6	31.3	32.3	32.0	33.2	34.3	35.9	37.1	37.4	39.2	40.3	41.0	42.0	42.5	42.2	41.1	39.7	41.9	37.5	29.4	25.1	18.9	16.5	13.7		51.8
	Signal to noise (dB)	0.7	1.3	1.1	1.2	1.4	3.1	2.9	2.1	2.6	2.3	3.0	3.3	3.4	4.8	6.1	7.5	9.6	11.2	13.0	13.5	13.9	17.9	15.6	9.5	6.7	3.7	2.7	2.7		6.6
	Uncertainty (dB)	4.6	3.8	2.7	3.6	2.5	2.2	2.0	2.0	2.0	2.0	1.7	1.6	1.6	1.2	1.0	0.9	0.8	0.8	0.8	0.8	0.8	0.8	1.1	1.2	1.3	2.1	3.2	3.9		1.0
	PWL (dBA)	67.6	71.7	73.7	75.9	78.2	81.8	82.8	82.6	83.7	84.8	86.4	87.6	88.0	89.8	90.8	91.5	92.5	93.0	92.7	91.7	90.3	92.5	88.1	80.0	75.6	69.5	67.1	64.3		102.4
12.0	Turbine ON (dBA)	20.2	24.0	26.3	28.9	31.0	34.4	35.8	35.2	36.3	37.1	38.8	39.6	39.8	40.9	41.4	41.8	42.5	42.9	42.6	41.5	40.1	41.6	37.5	30.4	26.8	23.2	22.3	20.8		52.8
	Background (dBA)	20.0	23.2	25.5	27.3	29.4	31.4	33.0	33.1	33.9	35.0	36.1	36.8	36.9	36.4	35.4	34.1	32.7	31.1	28.6	26.7	25.0	23.0	20.7	19.1	18.4	16.3	16.0	13.0		46.3
	Turbine ON - background adj (dBA)	17.2	21.0	23.3	25.9	28.0	31.4	32.8	32.2	33.3	34.1	35.8	36.6	36.8	38.9	40.2	41.0	42.0	42.6	42.4	41.4	39.9	41.5	37.4	30.0	26.1	22.3	21.2	20.0		51.8
	Signal to noise (dB)	0.2	0.8	0.8	1.6	1.6	3.0	2.7	2.2	2.4	2.1	2.7	2.7	2.9	4.4	6.0	7.7	9.8	11.8	13.9	14.8	15.1	18.6	16.8	11.2	8.4	6.9	6.3	7.7		6.5
	Uncertainty (dB)	4.6	3.8	2.7	3.6	2.6	2.2	2.0	2.0	2.0	1.9	1.6	1.7	1.7	1.2	1.0	0.9	0.8	0.8	0.8	0.8	0.8	0.7	0.8	1.1	1.2	1.2	1.5	2.1	2.4	1.0
	PWL (dBA)	67.7	71.6	73.9	76.5	78.5	82.0	83.3	82.8	83.8	84.7	86.3	87.1	87.3	89.5	90.8	91.5	92.6	93.1	92.9	91.9	90.5	92.1	88.0	80.6	76.7	72.8	71.7	70.5		102.4
12.5	Turbine ON (dBA)	20.5	24.2	27.2	29.0	31.5	34.5	35.9	35.7	36.7	37.7	39.0	39.7	40.2	41.0	41.2	41.3	41.9	42.5	42.2	41.2	39.8	41.2	36.7	29.4	25.6	20.7	18.4	15.0		52.6
	Background (dBA)	19.9	23.0	25.1	27.0	28.9	31.1	32.3	32.9	33.7	34.8	35.8	36.6	36.6	36.0	35.0	33.9	32.4	30.9	28.4	26.5	24.9	23.0	20.7	19.3	18.4	16.3	16.2	13.0		46.0
	Turbine ON - background adj (dBA)	17.5	21.2	24.2	26.0	28.5	31.9	33.3	32.7	33.8	34.7	36.2	36.9	37.6	39.3	40.0	40.5	41.4	42.1	42.0	41.1	39.7	41.2	36.5	28.9	24.7	18.7	15.4	12.0		51.6
	Signal to noise (dB)	0.6	1.2	2.1	2.0	2.5	3.4	3.5	2.8	3.1	2.8	3.2	3.2	3.6	5.0	6.2	7.5	9.6	11.6	13.8	14.7	14.9	18.2	15.9	10.1	7.2	4.4	2.2	2.0		6.6
	Uncertainty (dB)	4.2	3.5	2.6	3.3	2.4	1.8	1.6	1.9	1.8	1.8	1.5	1.6	1.4	1.1	0.9	0.8	0.7	0.7	0.7	0.7	0.7	0.8	1.0	1.1	1.2	1.7	2.9	3.6		1.0
	PWL (dBA)	68.1	71.8	74.7	76.6	79.0	82.4	83.9	83.3	84.3	85.2	86.8	87.4	88.2	89.8	90.6	91.0	92.0	92.7	92.5	91.6	90.2	91.7	87.1	79.5	75.2	69.3	66.0	62.6		102.1

Table C.02 Detailed apparent sound power level data at 10m height

Project: North Kent Wind Farm - Turbine T36 - IEC 61400-11 Measurement

Report ID: 172831.01.T36.RP2

Created on: 2/22/2019

1/3 Octave values marked with brackets [ ] denote less than 3 dB difference between Turbine ON and Background

Overall levels marked with an asterisk * denote 3 to 6 dB difference between Turbine ON and Background, while Overall values with less than 3 dB difference between Turbine ON and Background are not reported

Wind Bin (m/s)	Parameter	1/3 Octave Band (Hz)																													Overall
		20	25	31.5	40	50	63	80	100	125	160	200	250	315	400	500	630	800	1000	1250	1600	2000	2500	3150	4000	5000	6300	8000	10000	
5.0	Turbine ON (dBA)	7.6	11.6	16.0	21.4	24.0	31.8	28.4	31.4	32.4	31.8	36.3	37.0	36.2	37.9	39.7	40.8	41.4	40.5	40.5	39.1	39.4	38.6	32.1	28.5	24.0	18.2	10.7	7.2	50.5
	Background (dBA)	6.6	9.6	12.2	15.5	18.5	21.6	21.5	21.5	21.9	22.7	24.1	24.7	25.1	25.8	26.5	29.8	30.8	30.5	31.8	30.9	26.2	21.5	18.2	15.3	12.5	11.6	10.4	8.1	39.7
	Turbine ON - background adj (dBA)	4.6	8.6	13.7	20.2	22.6	31.4	27.3	30.9	32.0	31.3	36.1	36.7	35.8	37.6	39.5	40.5	41.0	40.0	39.9	38.3	39.2	38.5	31.9	28.3	23.7	17.1	7.7	4.2	50.1
	Signal to noise (dB)	1.0	2.1	3.8	5.9	5.5	10.3	6.8	9.9	10.5	9.2	12.2	12.3	11.1	12.1	13.2	11.0	10.6	10.0	8.7	8.1	13.2	17.1	13.9	13.2	11.5	6.6	0.4	-0.9	10.8
	Uncertainty (dB)	5.0	4.2	2.0	2.4	1.8	1.2	1.3	1.1	1.1	1.1	0.9	0.9	0.9	0.9	0.9	0.9	0.9	1.0	1.1	1.1	0.9	1.0	1.3	1.3	1.3	1.6	3.4	4.3	1.0
	PWL (dBA)	55.1	59.2	64.3	70.7	73.1	82.0	77.9	81.5	82.5	81.8	86.6	87.3	86.4	88.1	90.1	91.0	91.5	90.6	90.4	88.9	89.7	89.1	82.5	78.8	74.3	67.7	58.3	54.8	100.6
6.0	Turbine ON (dBA)	11.9	16.0	19.4	22.8	26.2	33.2	34.3	32.5	33.7	35.2	38.4	39.1	38.7	40.6	42.2	43.2	43.7	43.2	42.9	41.3	40.2	42.4	37.4	30.6	26.7	21.1	15.0	11.5	52.9
	Background (dBA)	14.0	17.4	19.9	22.0	23.9	26.5	27.7	28.1	28.8	29.3	30.3	31.0	31.1	30.9	30.4	30.8	31.5	30.7	31.2	29.9	25.9	22.7	20.0	17.5	16.3	14.0	13.2	10.5	42.2
	Turbine ON - background adj (dBA)	8.9	13.0	16.4	19.8	23.2	32.1	33.2	30.5	32.0	33.8	37.6	38.3	37.8	40.1	41.9	42.9	43.4	43.0	42.6	41.0	40.0	42.4	37.3	30.4	26.3	20.1	12.0	8.5	52.6
	Signal to noise (dB)	-2.1	-1.5	-0.6	0.8	2.2	6.7	6.6	4.4	4.9	5.8	8.0	8.1	7.6	9.7	11.8	12.3	12.2	12.5	11.7	11.4	14.3	19.7	17.4	13.1	10.5	7.1	1.8	1.0	10.7
	Uncertainty (dB)	4.3	3.6	2.4	3.3	2.3	1.1	1.0	1.3	1.2	1.1	0.8	0.8	0.8	0.8	0.7	0.7	0.7	0.7	0.8	0.8	0.7	0.8	1.0	1.0	1.0	1.3	2.9	3.6	0.8
	PWL (dBA)	59.5	63.5	66.9	70.3	73.7	82.7	83.8	81.1	82.5	84.4	88.2	88.9	88.4	90.6	92.5	93.4	94.0	93.5	93.2	91.6	90.5	92.9	87.9	81.0	76.9	70.7	62.6	59.0	103.1
7.0	Turbine ON (dBA)	15.9	20.0	22.3	24.9	27.7	33.2	34.2	33.4	34.9	36.3	38.9	39.5	39.3	41.0	42.2	43.0	43.5	43.3	42.8	41.3	40.3	43.3	38.4	31.4	27.9	23.8	22.7	21.5	53.2
	Background (dBA)	17.5	20.8	23.0	25.2	27.4	29.7	30.5	31.3	32.5	32.8	33.9	34.5	34.7	34.3	33.5	32.7	31.9	31.0	30.5	29.1	26.6	23.5	21.2	19.3	18.3	16.5	15.8	13.3	44.7
	Turbine ON - background adj (dBA)	12.9	17.0	19.3	21.9	24.7	30.7	31.7	30.4	31.9	33.6	37.3	37.8	37.4	39.9	41.6	42.5	43.2	43.0	42.5	41.1	40.1	43.3	38.3	31.1	27.4	22.9	21.7	20.8	52.5
	Signal to noise (dB)	-1.6	-0.8	-0.7	-0.3	0.4	3.5	3.6	2.2	2.4	3.4	5.0	5.0	4.6	6.6	8.7	10.3	11.6	12.3	12.3	12.2	13.7	19.9	17.2	12.1	9.5	7.3	6.9	8.2	8.5
	Uncertainty (dB)	4.5	3.8	2.5	3.5	2.4	1.9	1.6	1.9	1.9	1.7	1.1	1.1	1.2	0.9	0.8	0.8	0.7	0.8	0.8	0.8	0.7	0.8	1.1	1.1	1.1	1.3	1.8	2.1	0.9
	PWL (dBA)	63.5	67.5	69.8	72.4	75.3	81.2	82.3	81.0	82.4	84.2	87.8	88.4	87.9	90.5	92.2	93.1	93.7	93.5	93.0	91.6	90.7	93.9	88.9	81.6	77.9	73.4	72.3	71.3	103.1
8.0	Turbine ON (dBA)	19.4	23.3	25.5	27.9	30.2	34.0	35.1	34.8	35.9	37.0	38.8	39.6	39.8	40.9	41.6	42.1	42.7	43.0	42.5	41.4	40.1	42.2	37.8	30.5	26.8	22.5	20.8	18.8	52.9
	Background (dBA)	19.6	22.9	25.1	27.2	29.2	31.1	32.5	32.9	33.7	34.8	35.9	36.5	36.6	36.2	35.3	34.1	32.8	31.3	29.1	27.4	25.6	23.6	21.5	19.9	19.0	17.0	16.4	13.5	46.1
	Turbine ON - background adj (dBA)	16.4	20.3	22.5	24.9	27.2	31.0	32.1	31.8	32.9	34.0	35.8	36.6	36.9	39.1	40.4	41.3	42.3	42.7	42.3	41.2	39.9	42.1	37.7	30.1	26.0	21.1	18.9	17.3	51.9
	Signal to noise (dB)	-0.2	0.4	0.4	0.7	1.0	2.8	2.6	1.9	2.2	2.1	2.9	3.0	3.1	4.7	6.3	7.9	10.0	11.6	13.5	14.0	14.5	18.6	16.3	10.6	7.8	5.5	4.5	5.3	6.7
	Uncertainty (dB)	4.3	3.5	2.4	3.3	2.3	2.0	1.8	1.8	1.8	1.8	1.5	1.5	1.5	1.1	0.9	0.8	0.7	0.8	0.8	0.7	0.7	0.8	1.0	1.1	1.1	1.5	2.1	2.4	0.9
	PWL (dBA)	67.0	70.9	73.1	75.5	77.8	81.5	82.6	82.3	83.4	84.5	86.3	87.1	87.4	89.7	91.0	91.9	92.8	93.2	92.9	91.8	90.5	92.7	88.2	80.6	76.6	71.7	69.5	67.8	102.5
9.0	Turbine ON (dBA)	21.8	25.4	28.3	30.3	32.4	35.2	36.8	36.6	37.5	38.3	39.4	40.1	40.6	41.3	41.4	41.5	42.0	42.6	42.4	41.4	40.0	40.9	36.5	29.4	25.7	20.9	18.6	14.9	52.9
	Background (dBA)	19.8	23.0	25.4	27.3	29.2	31.2	32.5	33.1	33.8	34.9	36.0	36.7	36.8	36.3	35.3	34.1	32.9	31.2	28.8	27.3	25.4	23.5	21.3	19.7	18.9	16.9	16.5	13.4	46.2
	Turbine ON - background adj (dBA)	18.8	22.4	25.3	27.4	29.5	33.0	34.9	34.0	35.0	35.5	36.9	37.4	38.2	39.6	40.2	40.6	41.4	42.2	42.2	41.3	39.8	40.8	36.4	28.9	24.7	18.7	15.6	11.9	51.8
	Signal to noise (dB)	2.0	2.3	2.9	3.0	3.2	4.0	4.4	3.5	3.7	3.3	3.5	3.4	3.8	5.0	6.2	7.3	9.1	11.3	13.5	14.1	14.6	17.4	15.3	9.7	6.8	4.0	2.1	1.5	6.7
	Uncertainty (dB)	5.2	4.4	3.1	4.1	2.8	2.1	1.8	2.1	1.9	2.1	1.7	1.8	1.6	1.4	1.2	1.1	1.0	1.0	1.0	0.9	0.9	1.0	1.3	1.4	1.6	2.3	3.6	4.5	1.2
	PWL (dBA)	69.3	72.9	75.8	77.9	80.1	83.6	85.4	84.6	85.6	86.1	87.4	88.0	88.8	90.1	90.8	91.1	92.0	92.8	92.7	91.8	90.4	91.4	87.0	79.5	75.2	69.2	66.1	62.5	102.4

Table C.03 Type B measurement uncertainty summary

Project: North Kent Wind Farm - Turbine T36 - IEC 61400-11 Measurement
Report ID: 17283.01.T36.RP2

Created on: 2/22/2019

Overall Equipment Uncertainties		
	Typical values	Used values
Calibration	0.2 dB	0.2 dB
Board	0.3 dB	0.3 dB
Distance	0.1 dB	0.1 dB
Air absorption	0 dB	0 dB
Weather	0.5 dB	0.5 dB

1/3 Octave Band Uncertainties		
Frequency (Hz)	Microphone Uncertainty	Overall (including overall equipment Uncertainties)
20	0.8 dB	2 dB
25	0.8 dB	1.6 dB
31.5	0.5 dB	1.1 dB
40	0.5 dB	1.5 dB
50	0.5 dB	1.1 dB
63	0.5 dB	0.9 dB
80	0.5 dB	0.8 dB
100	0.5 dB	0.8 dB
125	0.5 dB	0.8 dB
160	0.5 dB	0.8 dB
200	0.3 dB	0.7 dB
250	0.3 dB	0.7 dB
315	0.3 dB	0.7 dB
400	0.3 dB	0.7 dB
500	0.3 dB	0.7 dB
630	0.3 dB	0.7 dB
800	0.3 dB	0.7 dB
1000	0.3 dB	0.8 dB
1250	0.3 dB	0.8 dB
1600	0.3 dB	0.8 dB
2000	0.3 dB	0.7 dB
2500	0.5 dB	0.8 dB
3150	0.5 dB	1.1 dB
4000	0.5 dB	1.1 dB
5000	0.5 dB	1 dB
6300	0.5 dB	1.1 dB
8000	0.5 dB	1.4 dB
10000	1.3 dB	1.7 dB

Table C.04 Detailed measruement uncertainty at hub height

Project: North Kent Wind Farm - Turbine T36 - IEC 61400-11 Measurement
Report ID: 172831.01.T36.RP2

Created on: 2/22/2019

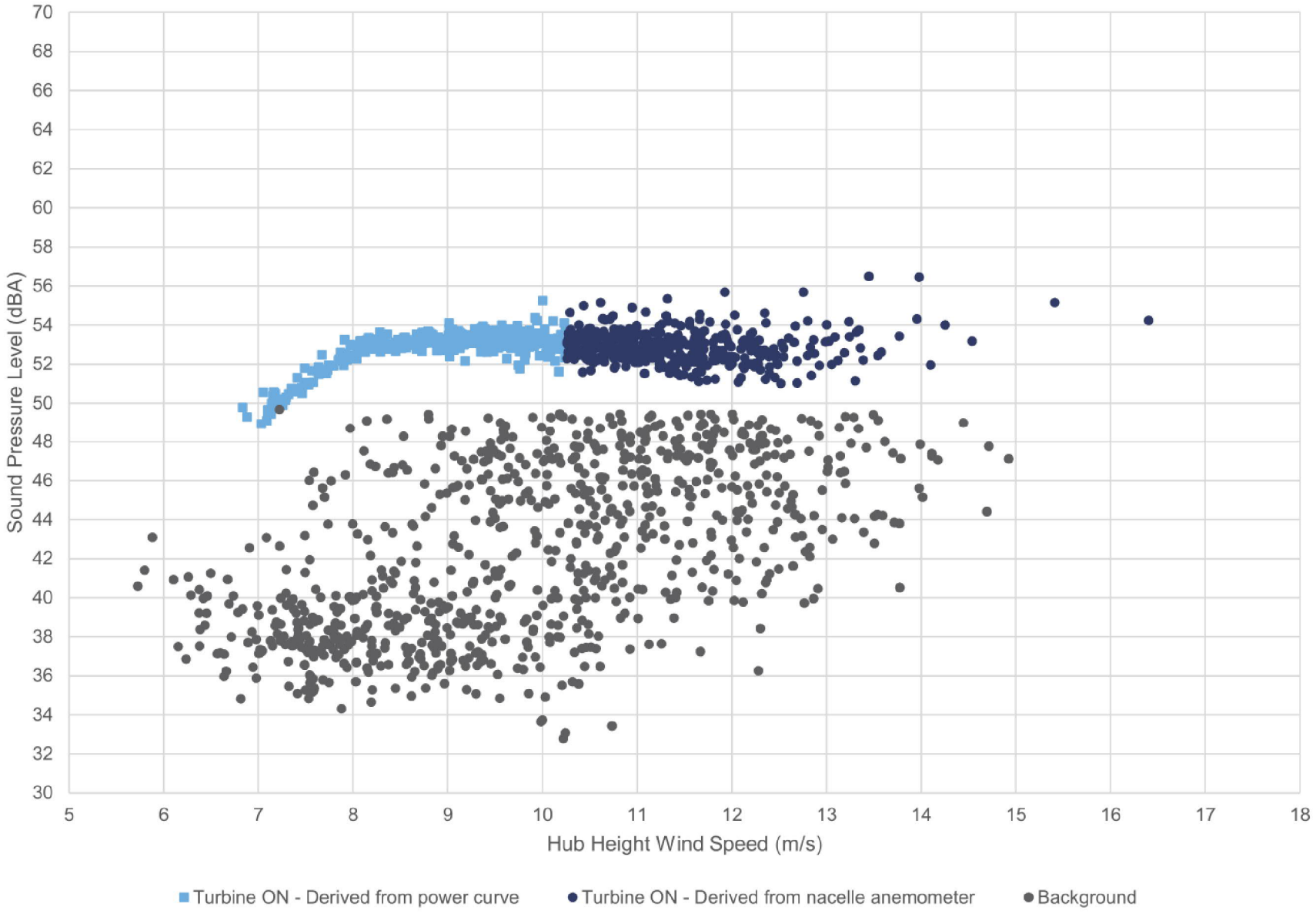
Wind Bin (m/s)	Parameter	Average Wind Speed (m/s)	# of data points	Parameter	1/3 Octave Band (Hz)																													Overall
					20	25	31.5	40	50	63	80	100	125	160	200	250	315	400	500	630	800	1000	1250	1600	2000	2500	3150	4000	5000	6300	8000	10000	
7.5	Turbine ON	7.48	26	Average (dBA)	8.4	12.4	16.6	22.1	24.2	32.1	29.2	30.7	32.1	32.4	36.5	37.1	36.5	38.4	40.3	41.5	42.1	41.3	41.3	39.8	39.7	39.8	33.1	29.0	24.7	18.8	11.4	7.8	51.1
				Uncertainty A (dB)	0.2	0.2	0.2	0.5	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.3	0.1	0.3	0.2	0.1	0.2	0.2	0.1	0.1		
				Uncertainty B (dB)	2.0	1.6	1.1	1.5	1.1	0.9	0.8	0.8	0.8	0.8	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.8	0.8	0.8	0.7	0.8	1.1	1.1	1.0	1.1	1.4	1.7		
				Combined Uncertainty (dB)	2.0	1.7	1.1	1.6	1.1	1.0	0.9	0.8	0.8	0.8	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.8	0.8	0.8	0.7	0.9	1.1	1.1	1.0	1.1	1.4	1.7		
	Background	7.51	67	Average (dBA)	8.9	11.7	13.9	16.9	19.7	22.7	22.7	23.1	23.6	24.5	25.8	26.2	26.3	26.6	27.0	29.5	30.5	30.2	31.0	29.3	24.9	20.6	17.3	14.4	12.2	11.4	10.8	8.4	39.6
				Uncertainty A (dB)	1.4	1.2	0.9	0.8	0.6	0.6	0.6	0.7	0.9	1.0	0.9	0.9	0.7	0.7	0.5	0.3	0.3	0.2	0.5	0.6	0.6	0.6	0.5	0.4	0.4	0.3	0.3	0.2		
				Uncertainty B (dB)	2.0	1.6	1.1	1.5	1.1	0.9	0.8	0.8	0.8	0.8	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.8	0.8	0.8	0.7	0.8	1.1	1.1	1.0	1.1	1.4	1.7		
				Combined Uncertainty (dB)	2.4	2.0	1.4	1.7	1.2	1.1	1.0	1.1	1.2	1.3	1.2	1.1	1.0	1.0	0.8	0.8	0.8	0.8	0.8	0.9	1.0	0.9	1.0	1.2	1.1	1.1	1.1	1.4	1.7	
8.0	Turbine ON	8.07	31	Average (dBA)	11.0	15.0	18.8	22.4	25.9	33.2	34.1	32.3	33.1	34.6	38.1	38.8	38.4	40.3	42.2	43.2	43.8	43.2	42.9	41.4	40.0	42.1	36.8	30.5	26.5	20.8	13.8	9.9	52.8
				Uncertainty A (dB)	0.5	0.4	0.3	0.2	0.3	0.1	0.3	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.2	0.2	0.1	0.1	0.2	0.4	0.4		
				Uncertainty B (dB)	2.0	1.6	1.1	1.5	1.1	0.9	0.8	0.8	0.8	0.8	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.8	0.8	0.8	0.7	0.8	1.1	1.1	1.0	1.1	1.4	1.7		
				Combined Uncertainty (dB)	2.0	1.7	1.1	1.5	1.1	1.0	0.9	0.8	0.8	0.8	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.8	0.8	0.8	0.7	0.8	1.1	1.1	1.0	1.1	1.4	1.8		
	Background	8.01	68	Average (dBA)	11.2	14.4	17.5	19.2	21.4	24.3	24.9	25.3	25.8	26.3	27.4	28.2	28.5	28.7	28.6	30.3	31.1	30.8	32.4	30.7	25.7	21.8	18.7	15.9	13.8	12.5	11.6	9.2	41.0
				Uncertainty A (dB)	1.6	1.4	1.2	1.0	0.8	0.8	0.9	1.0	1.1	1.2	1.1	1.1	0.9	0.8	0.6	0.4	0.3	0.2	0.5	0.6	0.5	0.6	0.7	0.6	0.6	0.4	0.4	0.3		
				Uncertainty B (dB)	2.0	1.6	1.1	1.5	1.1	0.9	0.8	0.8	0.8	0.8	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.8	0.8	0.8	0.7	0.8	1.1	1.1	1.0	1.1	1.4	1.7		
				Combined Uncertainty (dB)	2.6	2.2	1.6	1.8	1.4	1.3	1.2	1.3	1.4	1.4	1.3	1.3	1.2	1.1	0.9	0.8	0.8	0.8	0.9	0.9	0.9	1.0	1.2	1.2	1.1	1.1	1.4	1.7		
8.5	Turbine ON	8.47	57	Average (dBA)	11.3	15.7	19.1	22.6	26.0	32.9	34.5	32.3	33.4	35.1	38.3	39.0	38.7	40.7	42.3	43.4	43.9	43.4	43.2	41.6	40.2	42.5	37.6	30.7	26.8	21.2	14.8	11.1	53.1
				Uncertainty A (dB)	0.5	0.4	0.3	0.3	0.2	0.1	0.1	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.3	0.4		
				Uncertainty B (dB)	2.0	1.6	1.1	1.5	1.1	0.9	0.8	0.8	0.8	0.8	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.8	0.8	0.8	0.7	0.8	1.1	1.1	1.0	1.1	1.4	1.7		
				Combined Uncertainty (dB)	2.0	1.7	1.1	1.6	1.1	1.0	0.8	0.8	0.8	0.8	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.8	0.8	0.8	0.7	0.8	1.1	1.1	1.0	1.1	1.4	1.7		
	Background	8.51	52	Average (dBA)	13.4	17.5	19.8	21.9	23.7	26.7	28.3	27.4	27.6	29.0	29.9	30.6	30.7	30.4	30.1	30.7	30.9	30.5	30.6	29.0	26.3	24.2	21.5	18.9	18.2	14.9	13.7	11.1	41.9
				Uncertainty A (dB)	1.8	1.7	1.5	1.3	1.0	1.0	1.2	1.1	1.3	1.4	1.3	1.3	1.2	1.0	0.7	0.4	0.3	0.3	0.5	0.6	0.7	0.9	0.9	0.8	1.0	0.6	0.6	0.5		
				Uncertainty B (dB)	2.0	1.6	1.1	1.5	1.1	0.9	0.8	0.8	0.8	0.8	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.8	0.8	0.8	0.7	0.8	1.1	1.1	1.0	1.1	1.4	1.7		
				Combined Uncertainty (dB)	2.7	2.4	1.9	2.0	1.5	1.4	1.4	1.4	1.5	1.6	1.5	1.5	1.4	1.2	1.0	0.8	0.8	0.8	0.9	0.9	1.0	1.2	1.4	1.4	1.4	1.2	1.5	1.8		
9.0	Turbine ON	9.00	75	Average (dBA)	13.3	17.1	20.4	23.4	26.8	33.6	35.0	32.9	34.2	35.9	38.7	39.4	39.1	41.0	42.4	43.3	43.8	43.5	43.1	41.5	40.3	42.9	38.0	30.8	26.9	21.2	15.4	11.6	53.2
				Uncertainty A (dB)	0.6	0.5	0.4	0.4	0.3	0.1	0.1	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.3	0.4		
				Uncertainty B (dB)	2.0	1.6	1.1	1.5	1.1	0.9	0.8	0.8	0.8	0.8	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.8	0.8	0.8	0.7	0.8	1.1	1.1	1.0	1.1	1.4	1.7		
				Combined Uncertainty (dB)	2.1	1.7	1.2	1.6	1.1	1.0	0.8	0.9	0.9	0.8	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.8	0.8	0.8	0.7	0.8	1.1	1.1	1.0	1.1	1.4	1.7		
	Background	8.99	75	Average (dBA)	15.0	18.3	20.6	22.8	24.8	27.0	28.1	29.2	30.1	30.2	31.3	31.9	32.1	31.9	31.2	31.3	32.2	31.0	30.9	30.2	25.7	21.8	19.2	16.9	15.6	14.0	13.4	10.7	42.9
				Uncertainty A (dB)	1.7	1.5	1.3	1.1	1.0	0.9	0.9	1.1	1.3	1.3	1.2	1.2	1.1	0.9	0.7	0.4	0.4	0.3	0.5	0.6	0.6	0.6	0.6	0.6	0.6	0.5	0.5	0.4		
				Uncertainty B (dB)	2.0	1.6	1.1	1.5	1.1	0.9	0.8	0.8	0.8	0.8	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.8	0.8	0.8	0.7	0.8	1.1	1.1	1.0	1.1	1.4	1.7		
				Combined Uncertainty (dB)	2.6	2.3	1.7	1.9	1.5	1.3	1.2	1.4	1.5	1.6	1.4	1.4	1.3	1.2	1.0	0.8	0.8	0.8	0.9	1.0	0.9	1.0	1.2	1.2	1.2	1.2	1.4	1.7		
9.5	Turbine ON	9.50	110	Average (dBA)	14.7	18.6	21.0	23.9	27.0	33.4	34.7	33.0	34.7	36.2	39.0	39.6	39.2	41.1	42.4	43.2	43.7	43.3	42.9	41.4	40.4	43.3	38.3	31.3	27.7	23.1	21.3	19.8	53.3
				Uncertainty A (dB)	0.6	0.5	0.4	0.3	0.3	0.1	0.1	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.0	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.3	0.6	0.9		
				Uncertainty B (dB)	2.0	1.6	1.1	1.5	1.1	0.9	0.8	0.8	0.8	0.8	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.8	0.8	0.8	0.7	0.8	1.1	1.1	1.0	1.1	1.4	1.7		
				Combined Uncertainty (dB)	2.1	1.7	1.1	1.6	1.1	1.0	0.8	0.8	0.8	0.8	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.8	0.8	0.8	0.7	0.8	1.1	1.1	1.0	1.1	1.5	1.9		
	Background	9.49	78	Average (dBA)	17.1	20.2	22.5	24.6	27.0	29.7	30.3	31.4	33.2	32.3	33.4	34.1	34.2	33.8	33.1	32.4	31.9	31.0	31.0	29.3	25.9	23.1	20.6	18.5	17.8	15.5	14.4	11.8	44.4
				Uncertainty A (dB)	1.4	1.3	1.1	1.0	0.9	0.8	0.8	1.0	1.2	1.1	1.0	1.0	1.0	0.9	0.7	0.4	0.3	0.3	0.5	0.6	0.6	0.6	0.6	0.6	0.6	0.5	0.4	0.4		
				Uncertainty B (dB)	2.0	1.6	1.1	1.5	1.1	0.9	0.8	0.8	0.8	0.8	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.8	0.8	0.8	0.7	0.8	1.1	1.1	1.0	1.1	1.4	1.7		
				Combined Uncertainty (dB)	2.4	2.1	1.5	1.8	1.4	1.3	1.2	1.3	1.4	1.4	1.3	1.3	1.2	1.1	1.0	0.8	0.8	0.8	0.9	1.0	0.9	1.0	1.2	1.2	1.2	1.2	1.4	1.7		
10.0	Turbine ON	9.97	82	Average (dBA)	15.6	19.7	22.4	24.9	27.8	33.4	34.1	33.6	35.2	36.5	39.1	39.6	39.3	41.0	42.2	42.9	43.4	43.1	42.7	41.3	40.3	43.4	38.2	31.3	27.8	23.4	22.0	20.7	53.1
				Uncertainty A (dB)	0.7	0.6	0.6	0.4	0.4	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.2	0.2	0.4	0.7	1.0		
				Uncertainty B (dB)	2.0	1.6	1.1	1.5	1.1	0.9	0.8	0.8	0.8	0.8	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.8	0.8	0.8	0.7	0.8	1.1	1.1	1.0	1.1	1.4	1.7		
				Combined Uncertainty (dB)	2.1	1.7	1.2	1.6	1.1	1.0	0.8	0.9	0.9	0.8	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.8	0.8	0.8	0.7	0.8	1.1	1.1	1.0	1.1	1.5	2.0		
	Background	10.02	67	Average (dBA)	17.1	20.6	22.9	25.0	27.1	29.1	30.1	30.7	31.8	32.8	33.7	34.2	34.4	34.1	33.5	32.7	32.1	31.2	30.9	29.9	27.4	23.6	21.5	19.8	18.6	17.1	16.7	14.7	44.5
				Uncertainty A (dB)	1.6	1.4	1.3	1.1	1.0	0.9	1.0	1.0	1.2	1.3	1.2	1.2	1.1	1.0	0.9	0.6	0.5	0.4	0.6	0.7	0.8	0.7	0.8	0.8	0.8	0.7	0.7	0.7		
				Uncertainty B (dB)	2.0	1.6	1.1	1.5	1.1	0.9	0.8	0.8	0.8	0.8	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.8	0.8	0.8	0.7	0.8	1.1	1.1	1.0	1.1	1.4	1.7		
				Combined Uncertainty (dB)	2.5	2.2	1.6	1.9	1.5	1.3	1.3	1.3	1.4	1.5	1.4	1.4	1.3	1.3	1.1	0.9	0.8	0.8	1.0	1.1	1.1	1.1	1.3	1.3	1.3	1.3	1.5	1.9		
10.5	Turbine ON	10.48	108	Average (dBA)	16.6	20.8	22.9	25.4	28.1	32.7	33.7	33.4	34.7	36.0	38.6	39.2	39.1	40.8	42.1	42.9	43.4	43.3	42.7	41.4	40.2	43.4	38.7	31.4	28.1	24.6	24.0	22.9	53.1
				Uncertainty A (dB)	0.7	0.5	0.6	0.5	0.4	0.2	0.2	0.3	0.3	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.4	0.8	1.0		
				Uncertainty B (dB)	2.0	1.6	1.1	1.5	1.1	0.9	0.8	0.8	0.8	0.8	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.8	0.8	0.8	0.7	0.8	1.1	1.1	1.0	1.1	1.4	1.7		
				Combined Uncertainty (dB)	2.1	1.7	1.2	1.6	1.1	1.0	0.9	0.9	0.9	0.9	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.8	0.8	0.8	0.7	0.8	1.1	1.1	1.0	1.1	1.6	2.0		
	Background	10.49	86	Average (dBA)	17.9	21.1	23.3	25.4	27.6	29.8	30.9	31.3	32.0	33.1	34.2	34.9	35.0	34.7	33.7	32.6	31.6	30.7	29.2	27.9	26.1	23.4	21.1	19.3	18.4	16.5	15.8	12.9	44.7
				Uncertainty A (dB)	1.1	1.0	0.9	0.8	0.8	0.7	0.7	0.7	0.8	0.8	0.8	0.8	0.8	0.7	0.6	0.4	0.3	0.3	0.4	0.5	0.5	0.5	0.6	0.5	0.5	0.5	0.5	0.4		
				Uncertainty B (dB)	2.0	1.6	1.1	1.5	1.1	0.9	0.8	0.8	0.8	0.8	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.8	0.8	0.8	0.7	0.8	1.1	1.1	1.0	1.1	1.4	1.7		
				Combined Uncertainty (dB)	2.3	2.0	1.4	1.7	1.3	1.2	1.1	1.1	1.2	1.2	1.1	1.1	1.0	1.0	0.9	0.8	0.8	0.8	0.9	0.9	0.9	1.0	1.2	1.2	1.1	1.2	1.4	1.8		

Table C.04 Detailed measruement uncertainty at hub height

Project: North Kent Wind Farm - Turbine T36 - IEC 61400-11 Measurement
Report ID: 172831.01.T36.RP2

Created on: 2/22/2019

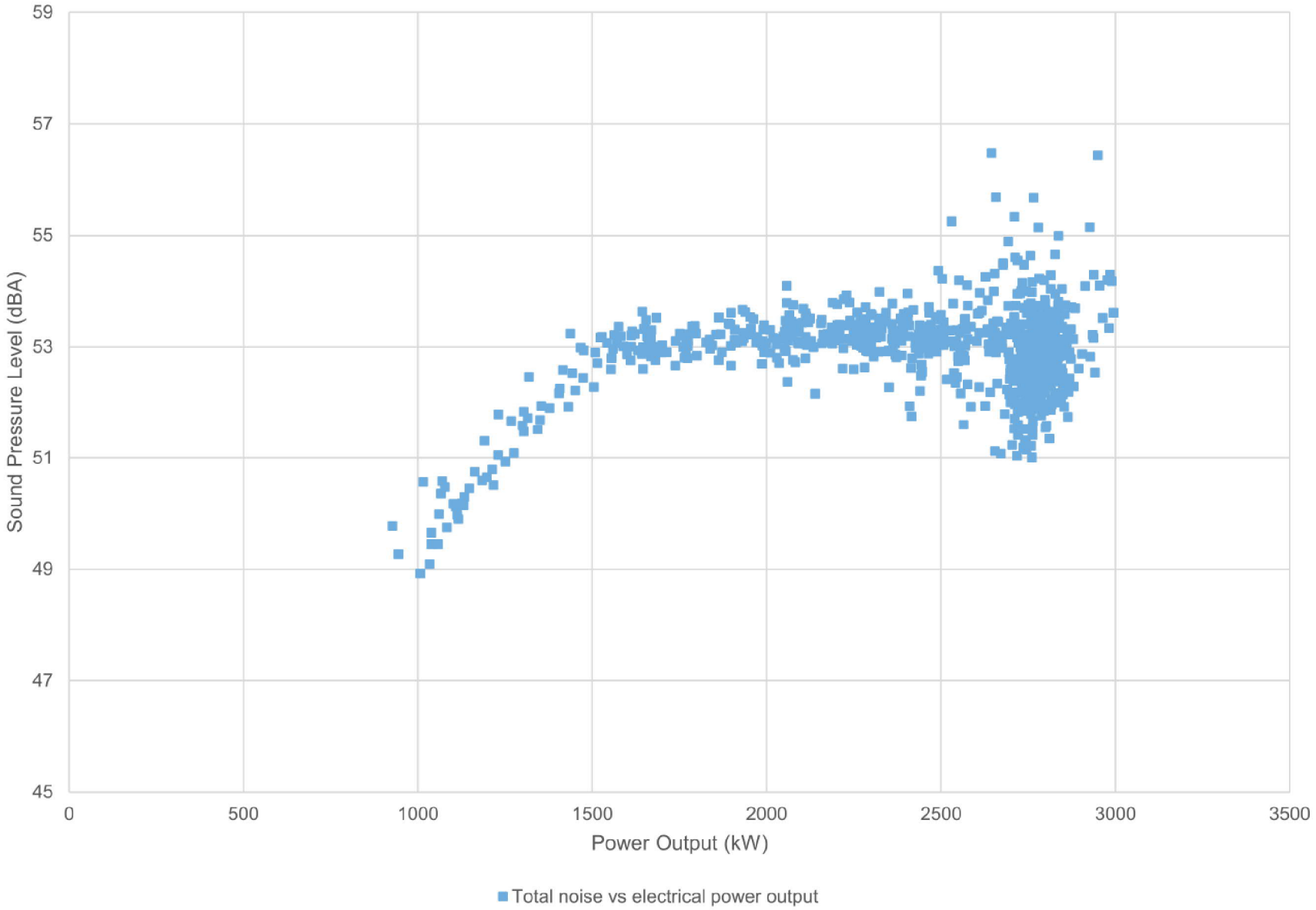
Wind Bin (m/s)	Parameter	Average Wind Speed (m/s)	# of data points	Parameter	1/3 Octave Band (Hz)																													Overall
					20	25	31.5	40	50	63	80	100	125	160	200	250	315	400	500	630	800	1000	1250	1600	2000	2500	3150	4000	5000	6300	8000	10000	
11.0	Turbine ON	11.00	105	Average (dBA)	17.8	21.6	23.7	26.3	28.8	33.2	34.2	33.9	35.1	36.3	38.5	39.2	39.3	40.8	41.7	42.5	43.1	43.2	42.7	41.4	40.2	42.8	38.2	31.0	27.4	23.1	21.1	19.3	52.9
				Uncertainty A (dB)	0.7	0.5	0.6	0.5	0.4	0.2	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.3	0.5	0.7		
				Uncertainty B (dB)	2.0	1.6	1.1	1.5	1.1	0.9	0.8	0.8	0.8	0.8	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.8	0.8	0.8	0.7	0.8	1.1	1.1	1.0	1.1	1.4	1.7		
				Combined Uncertainty (dB)	2.1	1.7	1.2	1.6	1.1	1.0	0.9	0.9	0.9	0.9	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.8	0.8	0.8	0.7	0.8	1.1	1.1	1.0	1.1	1.4	1.8		
	Background	10.98	66	Average (dBA)	19.6	22.8	24.9	27.2	29.0	30.9	32.2	32.7	33.6	34.6	35.7	36.3	36.5	36.0	35.1	34.0	32.7	31.2	29.0	27.5	25.5	23.6	21.4	19.8	18.9	16.8	16.2	13.4	46.0
				Uncertainty A (dB)	0.8	0.7	0.7	0.6	0.5	0.5	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.5	0.4	0.4	0.3	0.4	0.5	0.5	0.6	0.6	0.6	0.5	0.5	0.5	0.4		
				Uncertainty B (dB)	2.0	1.6	1.1	1.5	1.1	0.9	0.8	0.8	0.8	0.8	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.8	0.8	0.8	0.7	0.8	1.1	1.1	1.0	1.1	1.4	1.7		
				Combined Uncertainty (dB)	2.1	1.8	1.3	1.6	1.2	1.0	1.0	1.0	1.0	1.0	0.9	0.9	0.9	0.9	0.9	0.8	0.8	0.8	0.9	0.9	0.9	1.0	1.2	1.2	1.1	1.2	1.4	1.8		
11.5	Turbine ON	11.50	90	Average (dBA)	20.1	24.2	26.2	28.3	30.6	34.2	35.3	35.0	36.2	37.3	38.9	39.8	40.1	41.0	41.5	41.8	42.5	42.8	42.4	41.3	39.9	42.0	37.6	29.9	26.1	21.3	19.5	16.7	52.8
				Uncertainty A (dB)	0.6	0.4	0.5	0.5	0.4	0.2	0.2	0.3	0.3	0.3	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.2	0.3	0.4	0.5		
				Uncertainty B (dB)	2.0	1.6	1.1	1.5	1.1	0.9	0.8	0.8	0.8	0.8	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.8	0.8	0.8	0.7	0.8	1.1	1.1	1.0	1.1	1.4	1.7		
				Combined Uncertainty (dB)	2.1	1.7	1.2	1.6	1.1	1.0	0.9	0.9	0.9	0.9	0.7	0.8	0.7	0.7	0.7	0.7	0.7	0.8	0.8	0.8	0.7	0.8	1.1	1.1	1.0	1.1	1.4	1.8		
	Background	11.50	52	Average (dBA)	19.3	22.8	25.1	27.1	29.2	31.1	32.3	32.9	33.6	34.9	35.9	36.5	36.7	36.2	35.4	34.3	32.9	31.6	29.4	27.8	26.0	24.1	22.0	20.5	19.5	17.6	16.8	14.0	46.2
				Uncertainty A (dB)	0.8	0.8	0.7	0.6	0.6	0.5	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.5	0.4	0.4	0.5	0.6	0.6	0.6	0.7	0.6	0.6	0.6	0.5	0.5		
				Uncertainty B (dB)	2.0	1.6	1.1	1.5	1.1	0.9	0.8	0.8	0.8	0.8	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.8	0.8	0.8	0.7	0.8	1.1	1.1	1.0	1.1	1.4	1.7		
				Combined Uncertainty (dB)	2.1	1.8	1.3	1.7	1.2	1.1	1.0	1.0	1.0	1.0	0.9	0.9	0.9	1.0	0.9	0.9	0.8	0.9	0.9	0.9	0.9	1.0	1.3	1.2	1.2	1.2	1.5	1.8		
12.0	Turbine ON	12.00	57	Average (dBA)	20.2	24.0	26.3	28.9	31.0	34.4	35.8	35.2	36.3	37.1	38.8	39.6	39.8	40.9	41.4	41.8	42.5	42.9	42.6	41.5	40.1	41.6	37.5	30.4	26.8	23.3	22.3	20.8	52.8
				Uncertainty A (dB)	0.7	0.6	0.7	0.6	0.5	0.3	0.3	0.4	0.3	0.3	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.3	0.6	0.8	1.1		
				Uncertainty B (dB)	2.0	1.6	1.1	1.5	1.1	0.9	0.8	0.8	0.8	0.8	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.8	0.8	0.8	0.7	0.8	1.1	1.1	1.0	1.1	1.4	1.7		
				Combined Uncertainty (dB)	2.1	1.7	1.2	1.6	1.2	1.0	0.9	0.9	0.9	0.9	0.7	0.8	0.7	0.7	0.7	0.7	0.7	0.8	0.8	0.8	0.7	0.8	1.1	1.1	1.0	1.2	1.6	2.0		
	Background	11.98	53	Average (dBA)	20.0	23.2	25.5	27.3	29.4	31.4	33.1	33.1	33.9	35.0	36.1	36.8	36.9	36.4	35.4	34.2	32.7	31.1	28.7	26.7	25.0	23.0	20.7	19.1	18.4	16.3	16.0	13.0	46.3
				Uncertainty A (dB)	0.5	0.5	0.5	0.5	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.5	0.5	0.4	0.4	0.4	0.5	0.6	0.6	0.6	0.6	0.5	0.5	0.5	0.5		
				Uncertainty B (dB)	2.0	1.6	1.1	1.5	1.1	0.9	0.8	0.8	0.8	0.8	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.8	0.8	0.8	0.7	0.8	1.1	1.1	1.0	1.1	1.4	1.7		
				Combined Uncertainty (dB)	2.0	1.7	1.2	1.6	1.1	1.0	0.9	0.9	0.9	0.9	0.8	0.8	0.8	0.9	0.9	0.9	0.8	0.8	0.9	0.9	0.9	1.0	1.2	1.2	1.1	1.2	1.5	1.8		
12.5	Turbine ON	12.43	31	Average (dBA)	20.2	23.9	26.9	28.7	31.2	34.3	35.6	35.5	36.6	37.5	38.9	39.6	40.0	40.8	41.1	41.3	41.9	42.4	42.1	41.2	39.8	41.3	36.7	29.3	25.5	20.6	18.3	14.8	52.6
				Uncertainty A (dB)	0.7	0.6	0.7	0.6	0.5	0.3	0.4	0.5	0.4	0.4	0.3	0.3	0.3	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.3	0.5	0.5	0.6		
				Uncertainty B (dB)	2.0	1.6	1.1	1.5	1.1	0.9	0.8	0.8	0.8	0.8	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.8	0.8	0.8	0.7	0.8	1.1	1.1	1.0	1.1	1.4	1.7		
				Combined Uncertainty (dB)	2.1	1.8	1.3	1.6	1.2	1.0	0.9	0.9	0.9	0.9	0.8	0.8	0.8	0.8	0.7	0.7	0.7	0.8	0.8	0.8	0.7	0.8	1.1	1.1	1.0	1.2	1.5	1.8		
	Background	12.46	46	Average (dBA)	20.0	23.0	25.1	26.9	28.9	31.1	32.3	32.9	33.7	34.9	35.9	36.6	36.6	36.0	34.9	33.8	32.3	30.8	28.3	26.3	24.7	22.9	20.6	19.1	18.3	16.1	16.1	12.9	46.0
				Uncertainty A (dB)	0.6	0.6	0.6	0.5	0.5	0.5	0.5	0.5	0.5	0.4	0.5	0.5	0.5	0.6	0.6	0.5	0.4	0.4	0.4	0.5	0.6	0.7	0.7	0.6	0.6	0.6	0.6	0.5		
				Uncertainty B (dB)	2.0	1.6	1.1	1.5	1.1	0.9	0.8	0.8	0.8	0.8	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.8	0.8	0.8	0.7	0.8	1.1	1.1	1.0	1.1	1.4	1.7		
				Combined Uncertainty (dB)	2.1	1.8	1.2	1.6	1.2	1.1	1.0	1.0	0.9	0.9	0.8	0.9	0.9	0.9	0.9	0.9	0.8	0.8	0.9	0.9	0.9	1.1	1.3	1.2	1.2	1.2	1.5	1.8		



aercoustics

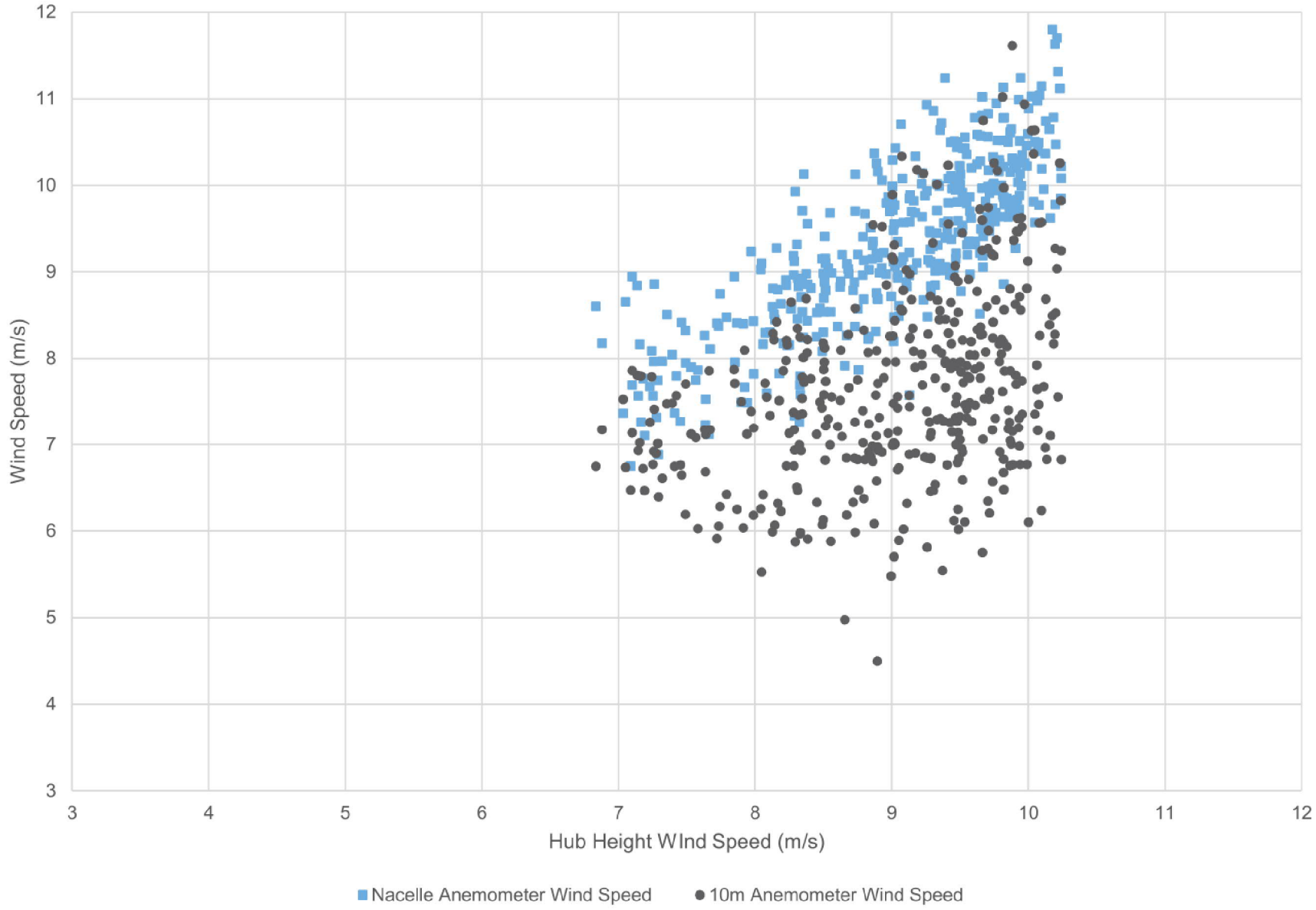
17283.01.T36.RP2	**Project Name**
Scale: NTS Drawn by: DEA Reviewed by: MAD Date: Feb 2019 Revision: 1	North Kent Wind Power Project - IEC 61400-11 Edition 3.0 - Turbine T36
	Figure Title Plot of overall measurement data pairs at Position 1 (Turbine ON & Background

Figure C.01



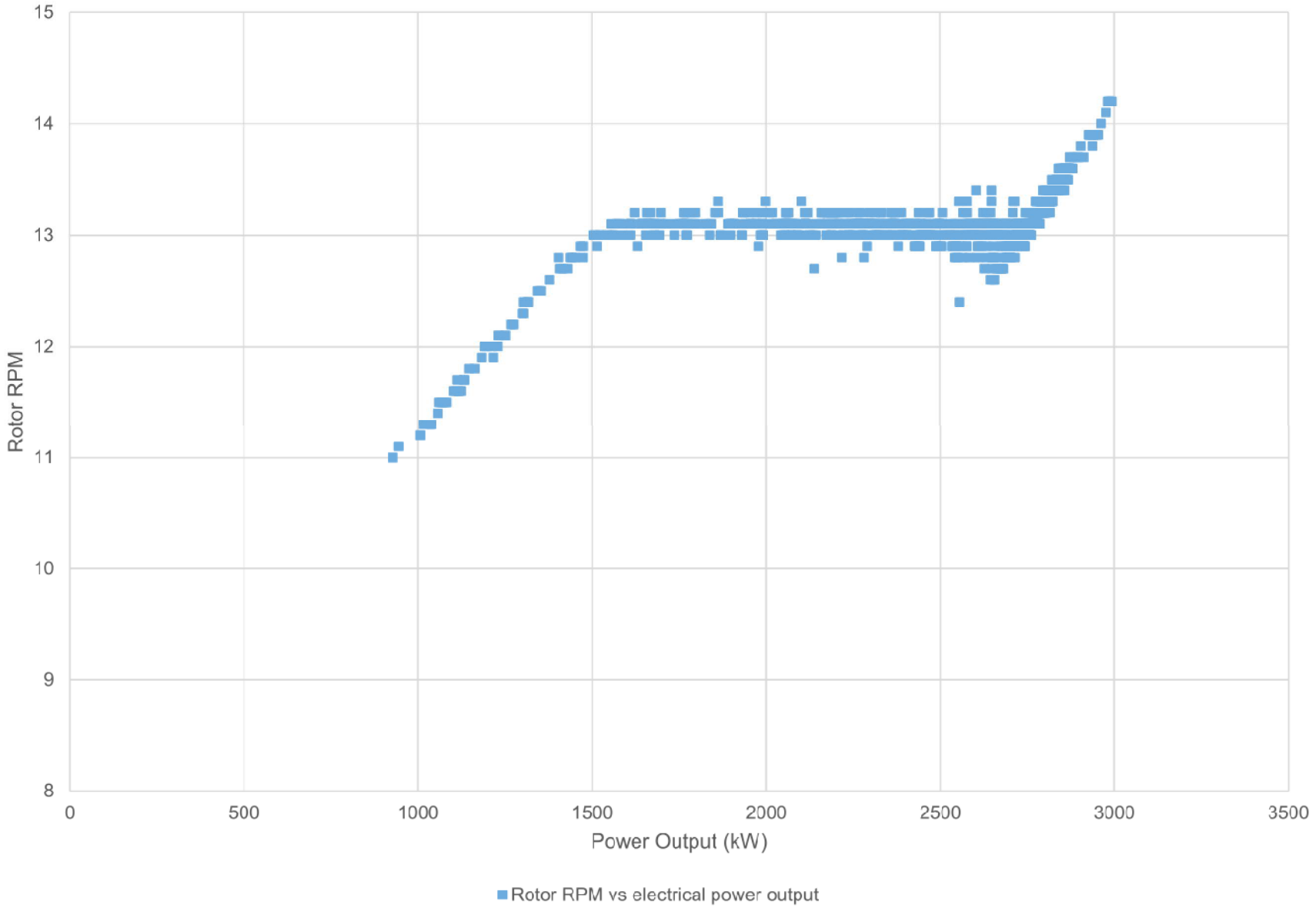
aercoustics	17283.01.T36.RP2 Scale: NTS Drawn by: DEA Reviewed by: MAD Date: Feb 2019 Revision: 1	**Project Name** North Kent Wind Power Project - IEC 61400-11 Edition 3.0 - Turbine T36 **Figure Title** Plot of measured total noise vs. electrical power output

Figure C.02



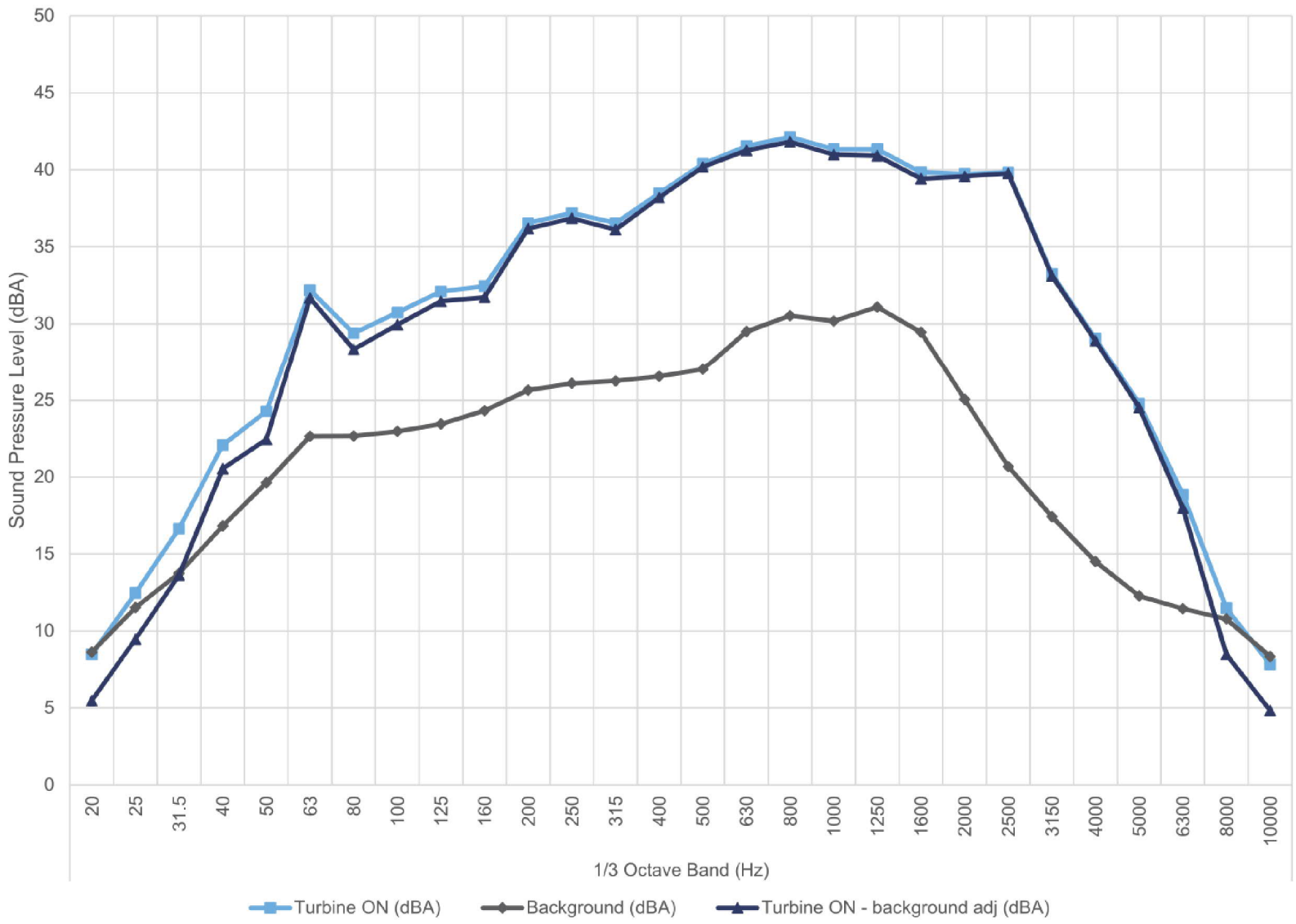
aercoustics	17283.01.T36.RP2 Scale: NTS Drawn by: DEA Reviewed by: MAD Date: Feb 2019 Revision: 1	**Project Name** North Kent Wind Power Project - IEC 61400-11 Edition 3.0 - Turbine T36 **Figure Title** Plot of power curve relative to nacelle anemometer and 10 m anemometer

Figure C.03



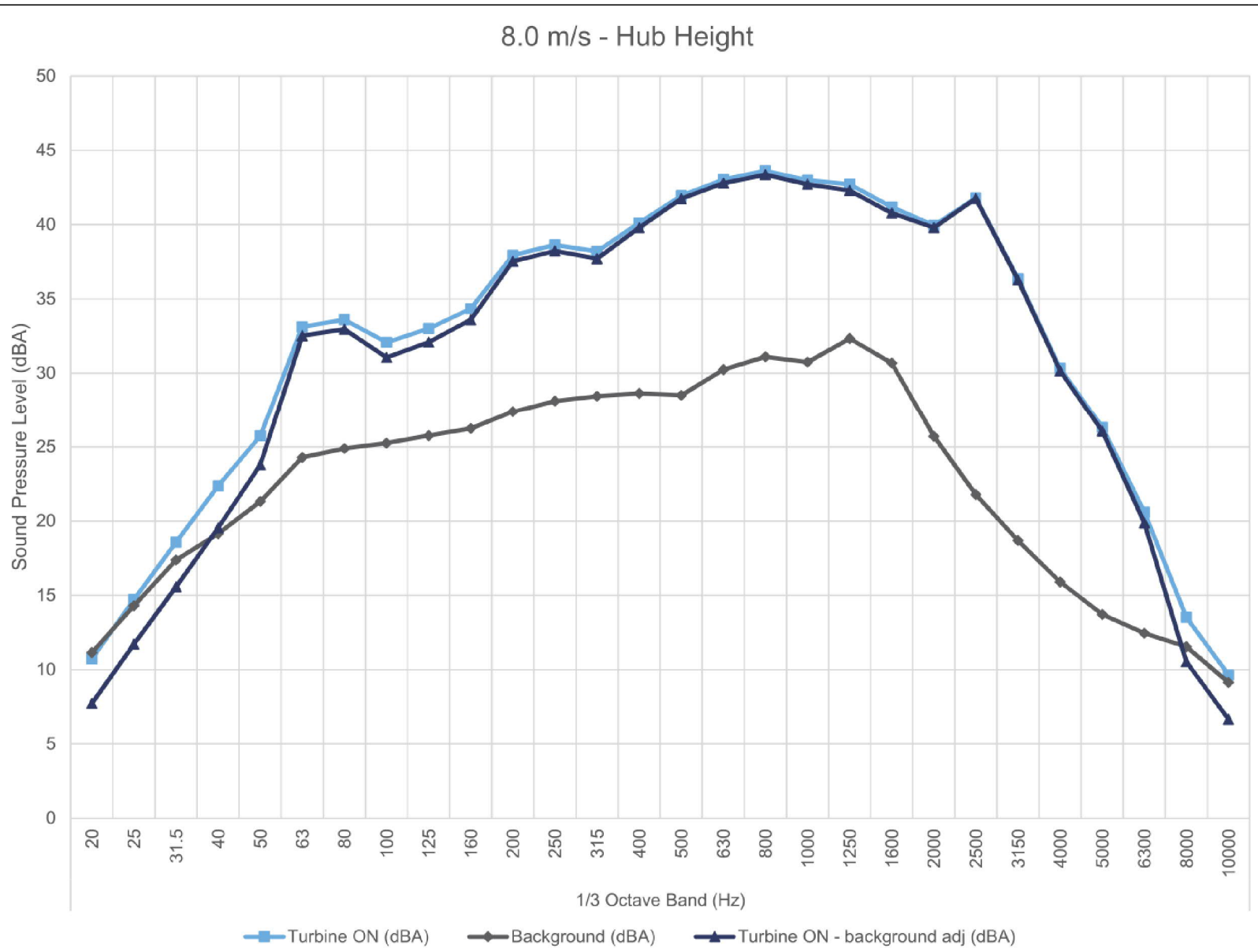
aercoustics	17283.01.T36.RP2 Scale: NTS Drawn by: DEA Reviewed by: MAD Date: Feb 2019 Revision: 1	**Project Name** North Kent Wind Power Project - IEC 61400-11 Edition 3.0 - Turbine T36 **Figure Title** Plot of rotor RPM vs. electrical power output

Figure C.04



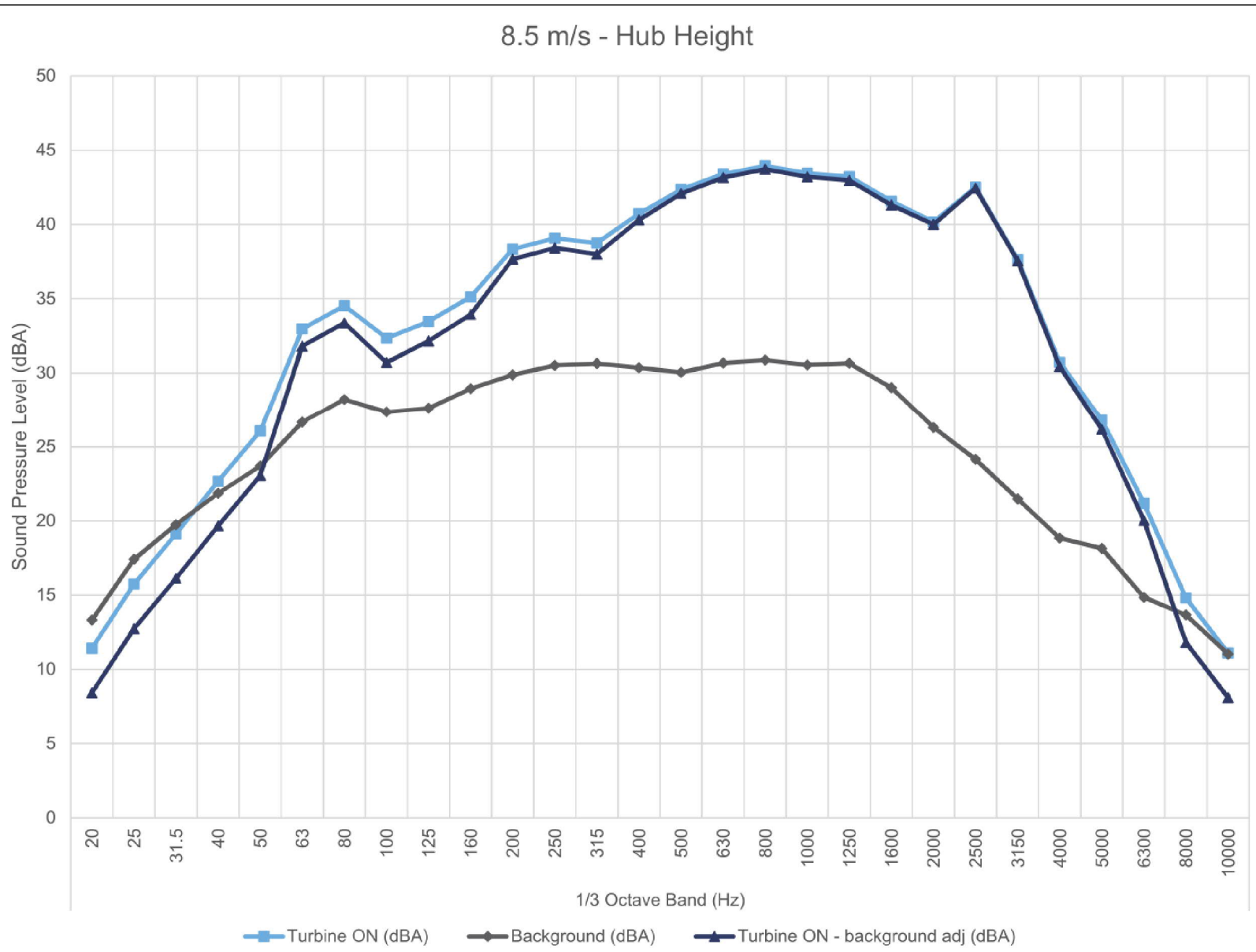
aercoustics	17283.01.T36.RP2 Scale: NTS Drawn by: DEA Reviewed by: MAD Date: Feb 2019 Revision: 1	**Project Name** North Kent Wind Power Project - IEC 61400-11 Edition 3.0 - Turbine T36 **Figure Title** Plot of sound pressure spectrum in 1/3 Octave at 7.5 m/s

Figure C.05



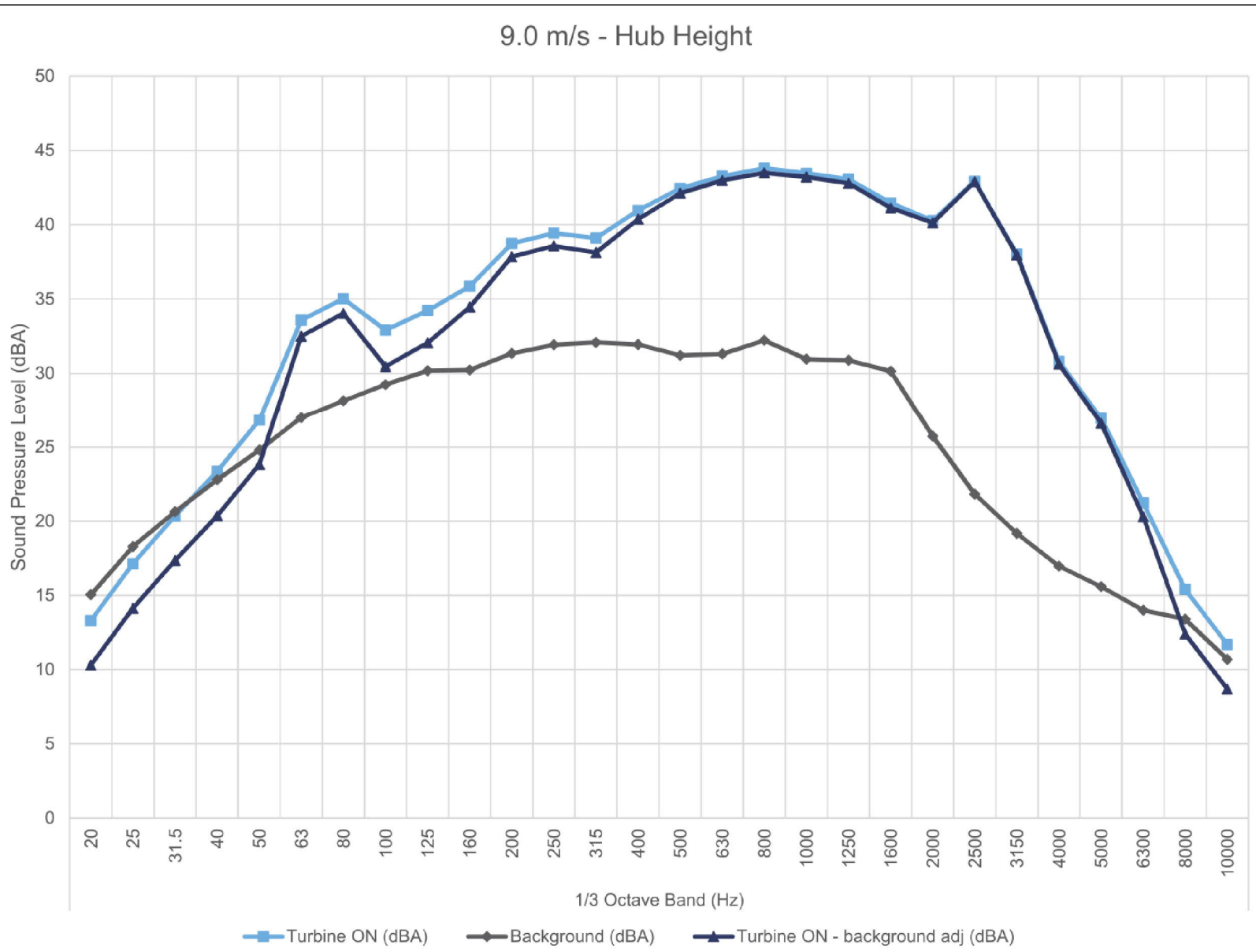
aercoustics	17283.01.T36.RP2 Scale: NTS Drawn by: DEA Reviewed by: MAD Date: Feb 2019 Revision: 1	**Project Name** North Kent Wind Power Project - IEC 61400-11 Edition 3.0 - Turbine T36 **Figure Title** Plot of sound pressure spectrum in 1/3 Octave at 8.0 m/s

Figure C.06



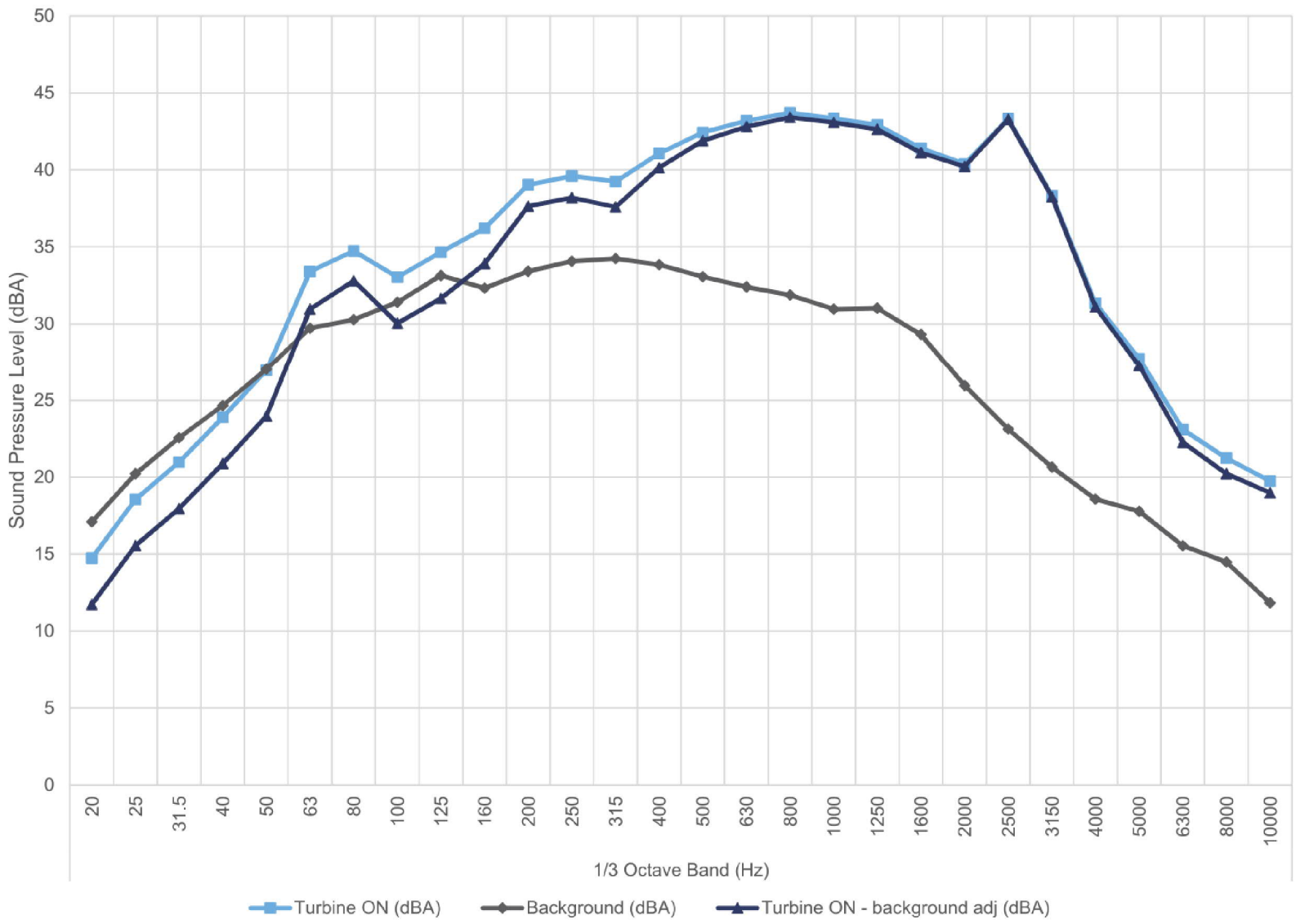
aercoustics	17283.01.T36.RP2 Scale: NTS Drawn by: DEA Reviewed by: MAD Date: Feb 2019 Revision: 1	**Project Name** North Kent Wind Power Project - IEC 61400-11 Edition 3.0 - Turbine T36 **Figure Title** Plot of sound pressure spectrum in 1/3 Octave at 8.5 m/s

Figure C.07



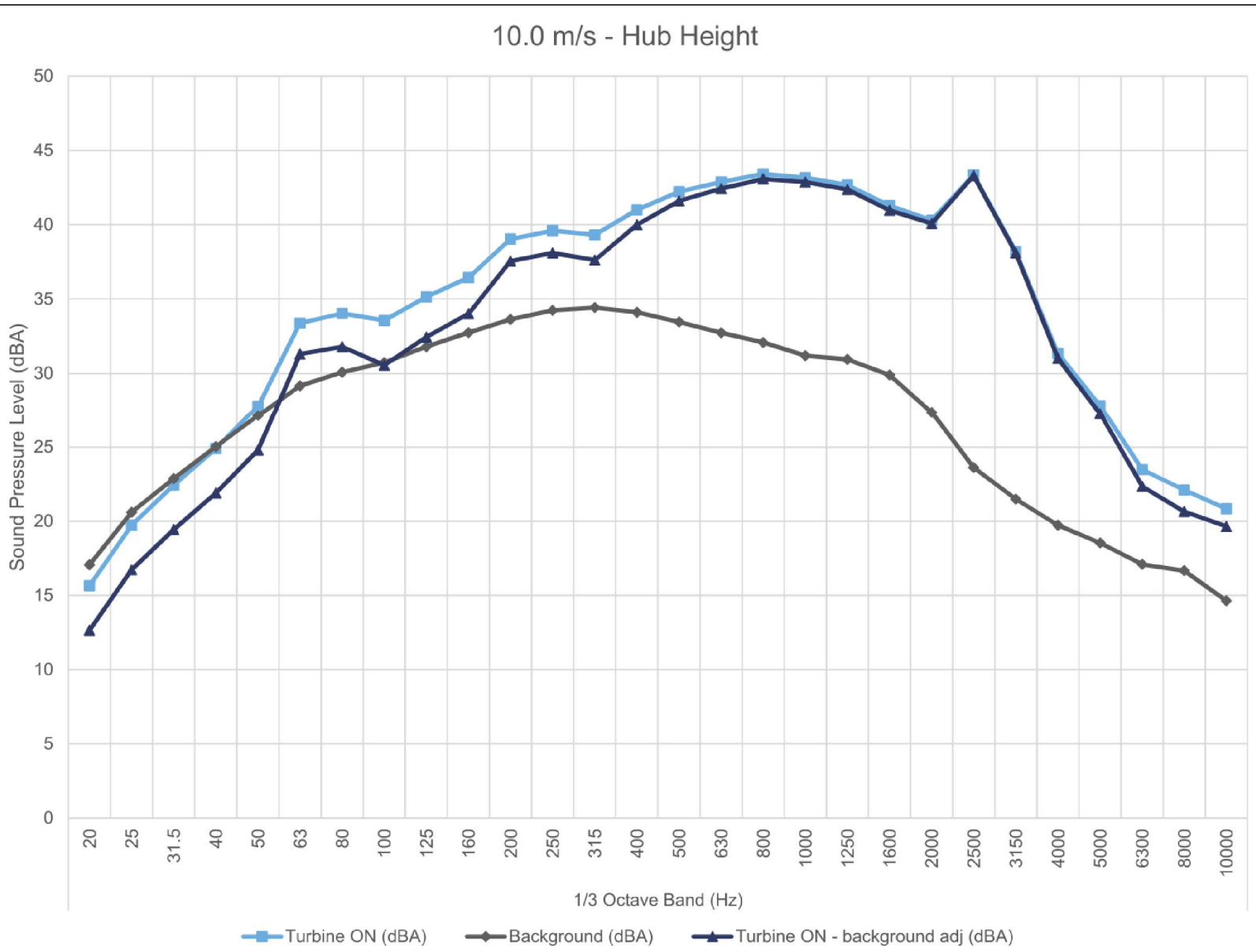
aercoustics	17283.01.T36.RP2 Scale: NTS Drawn by: DEA Reviewed by: MAD Date: Feb 2019 Revision: 1	**Project Name** North Kent Wind Power Project - IEC 61400-11 Edition 3.0 - Turbine T36 **Figure Title** Plot of sound pressure spectrum in 1/3 Octave at 9.0 m/s

Figure C.08



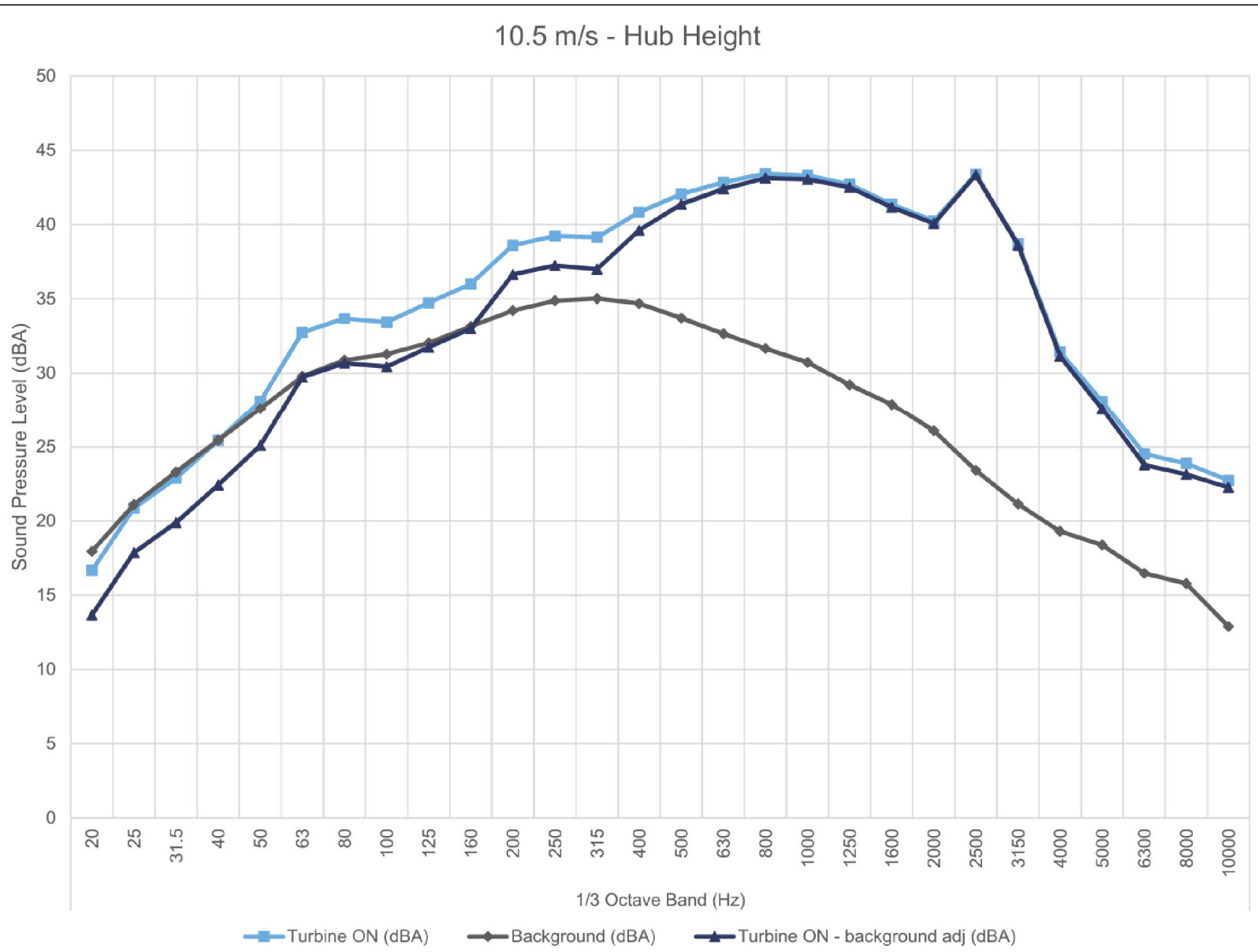
aercoustics	17283.01.T36.RP2 Scale: NTS Drawn by: DEA Reviewed by: MAD Date: Feb 2019 Revision: 1	**Project Name** North Kent Wind Power Project - IEC 61400-11 Edition 3.0 - Turbine T36 **Figure Title** Plot of sound pressure spectrum in 1/3 Octave at 9.5 m/s

Figure C.09



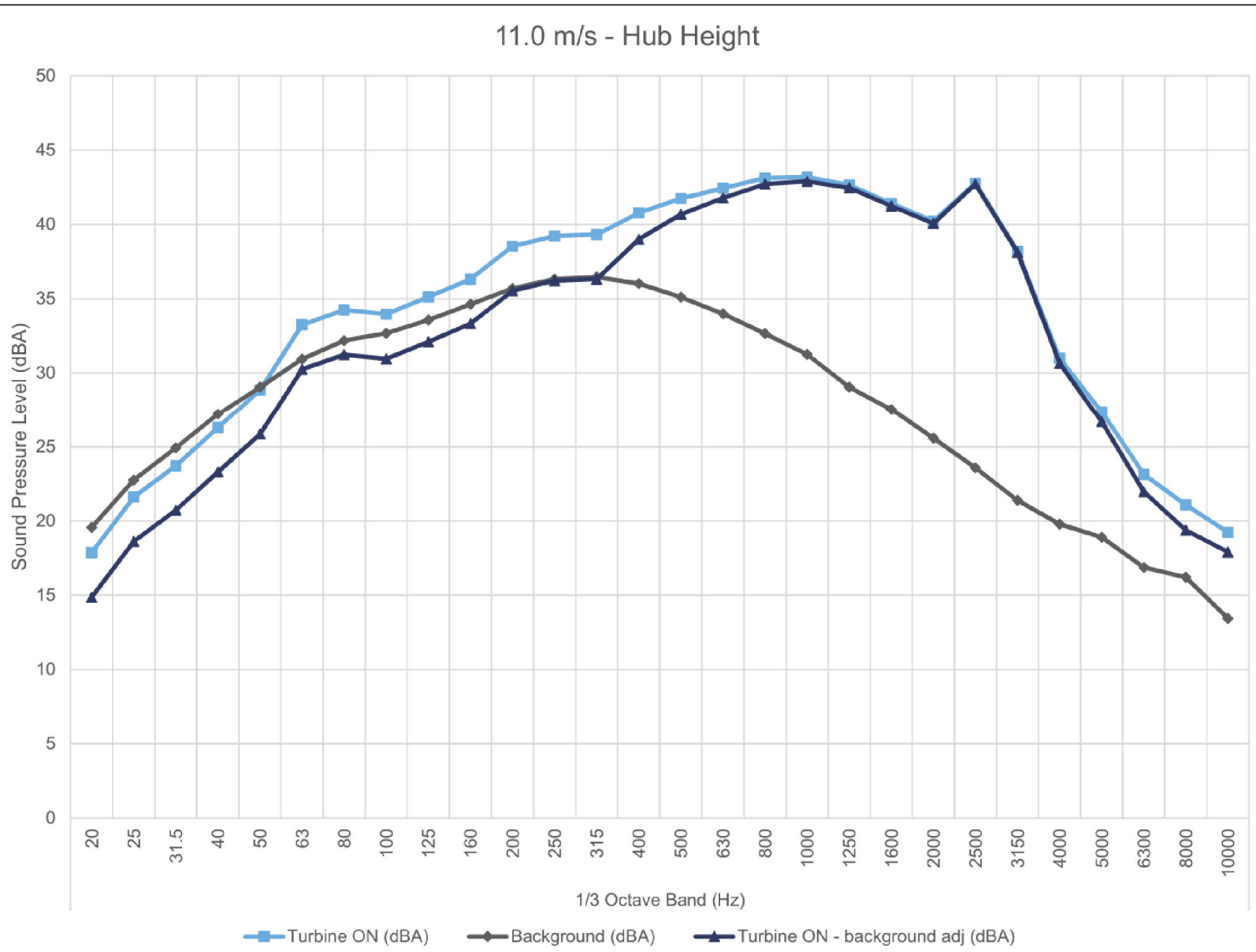
aercoustics	17283.01.T36.RP2 Scale: NTS Drawn by: DEA Reviewed by: MAD Date: Feb 2019 Revision: 1	**Project Name** North Kent Wind Power Project - IEC 61400-11 Edition 3.0 - Turbine T36 **Figure Title** Plot of sound pressure spectrum in 1/3 Octave at 10.0 m/s

Figure C.10



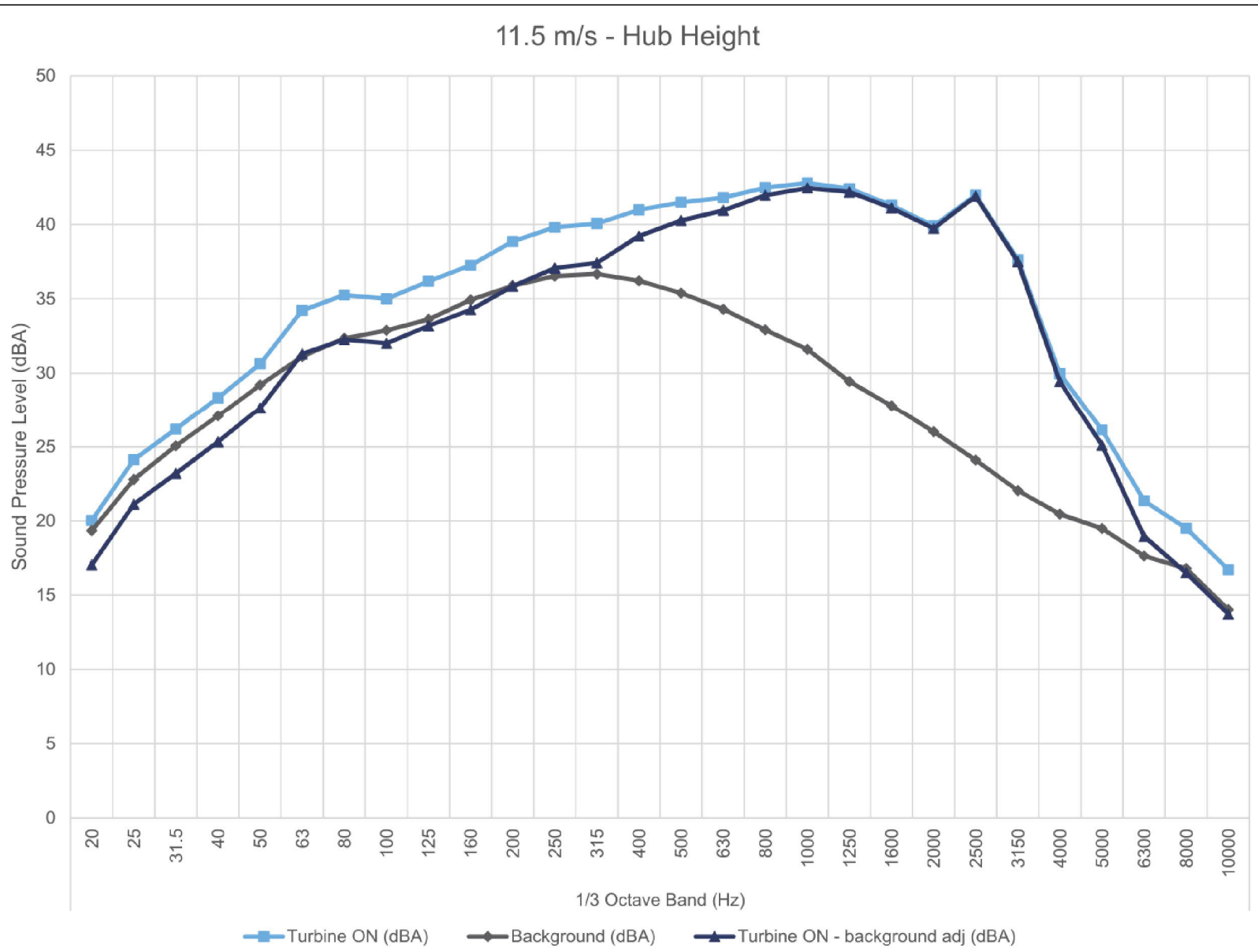
aercoustics	17283.01.T36.RP2 Scale: NTS Drawn by: DEA Reviewed by: MAD Date: Feb 2019 Revision: 1	**Project Name** North Kent Wind Power Project - IEC 61400-11 Edition 3.0 - Turbine T36 **Figure Title** Plot of sound pressure spectrum in 1/3 Octave at 10.5 m/s

Figure C.11



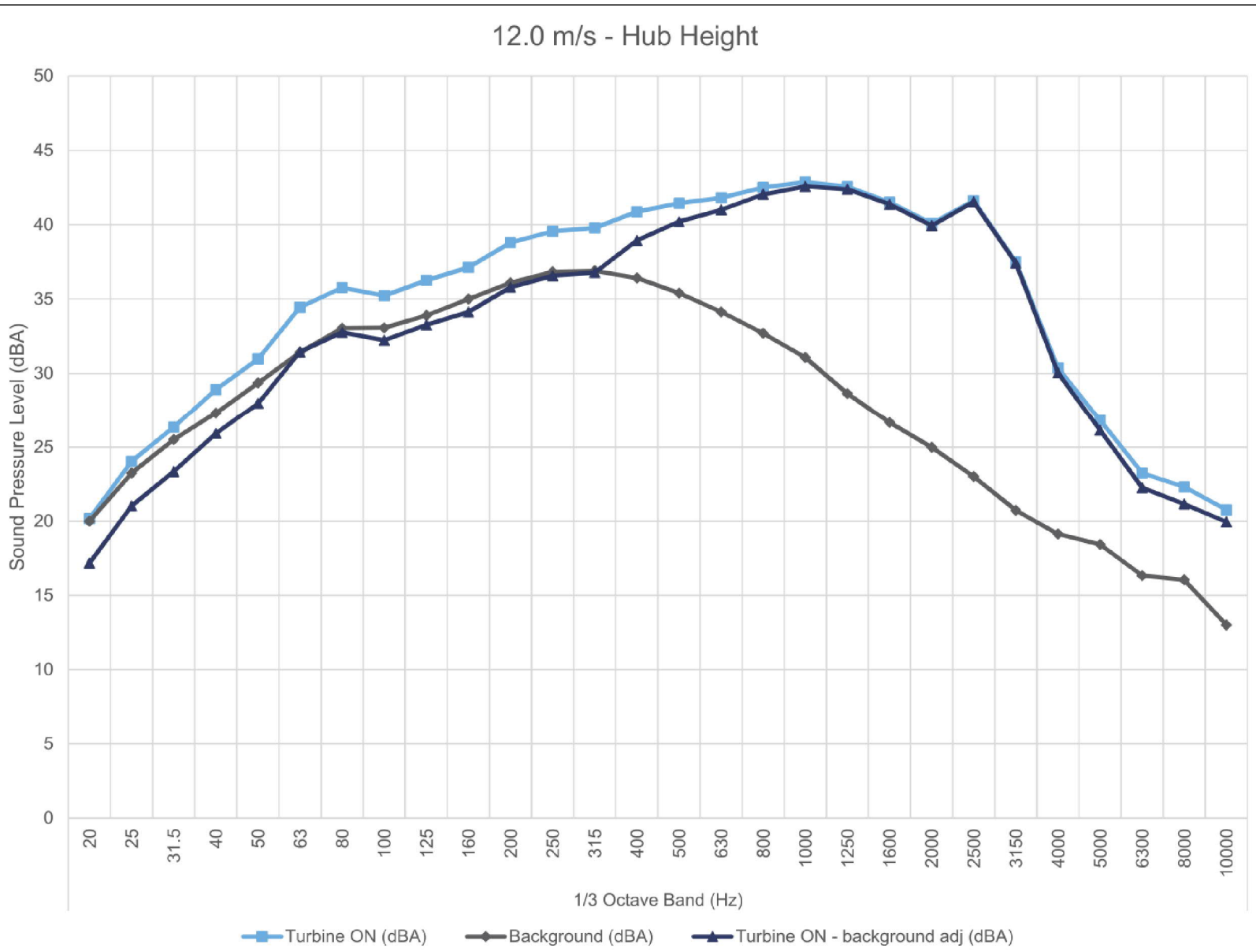
aercoustics	17283.01.T36.RP2 Scale: NTS Drawn by: DEA Reviewed by: MAD Date: Feb 2019 Revision: 1	**Project Name** North Kent Wind Power Project - IEC 61400-11 Edition 3.0 - Turbine T36 **Figure Title** Plot of sound pressure spectrum in 1/3 Octave at 11.0 m/s

Figure C.12

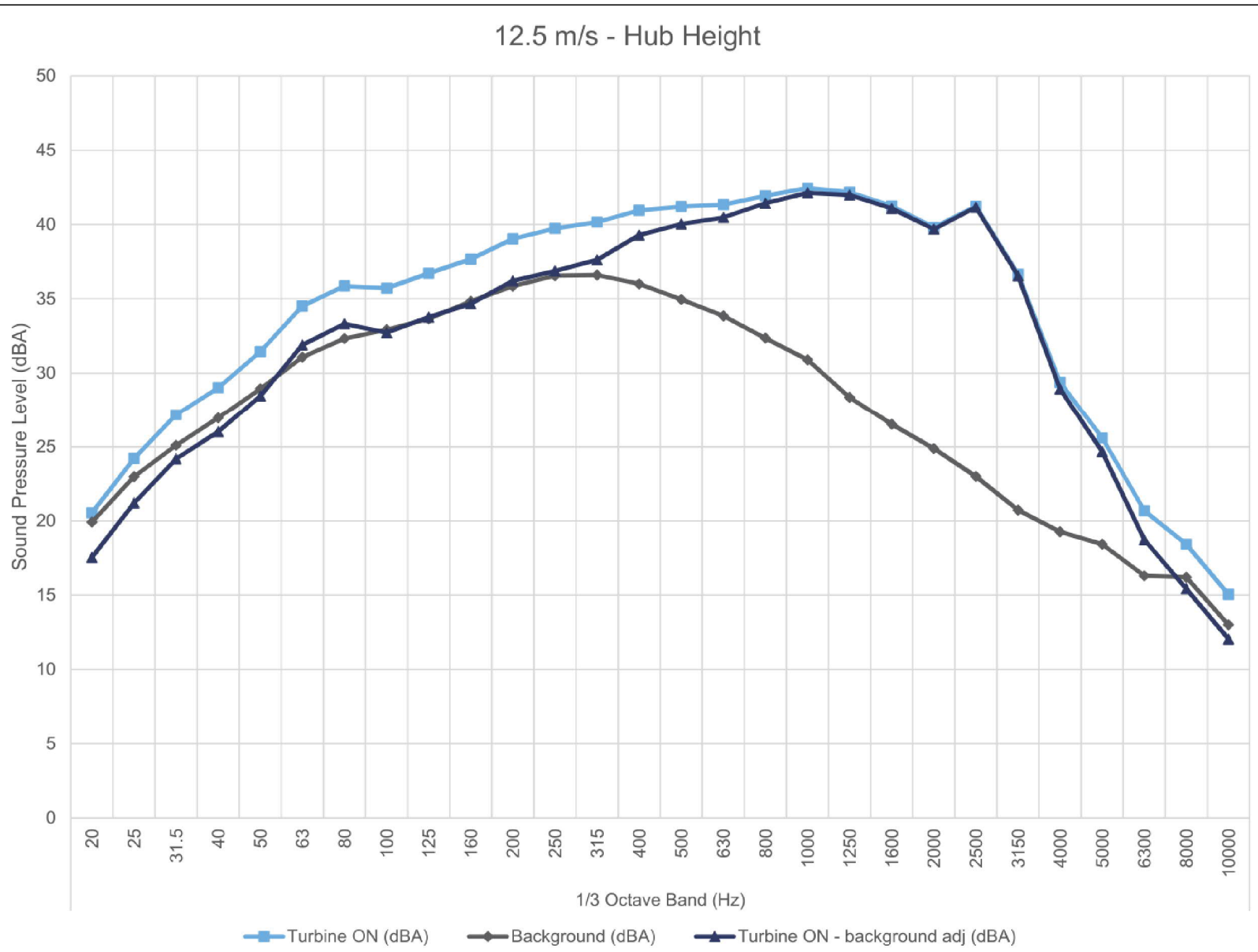


aercoustics	17283.01.T36.RP2 Scale: NTS Drawn by: DEA Reviewed by: MAD Date: Feb 2019 Revision: 1	**Project Name** North Kent Wind Power Project - IEC 61400-11 Edition 3.0 - Turbine T36 **Figure Title** Plot of sound pressure spectrum in 1/3 Octave at 11.5 m/s

Figure C.13



aercoustics	17283.01.T36.RP2 Scale: NTS Drawn by: DEA Reviewed by: MAD Date: Feb 2019 Revision: 1	**Project Name** North Kent Wind Power Project - IEC 61400-11 Edition 3.0 - Turbine T36 **Figure Title** Plot of sound pressure spectrum in 1/3 Octave at 12.0 m/s	**Figure C.14**



aercoustics	17283.01.T36.RP2 Scale: NTS Drawn by: DEA Reviewed by: MAD Date: Feb 2019 Revision: 1	**Project Name** North Kent Wind Power Project - IEC 61400-11 Edition 3.0 - Turbine T36 **Figure Title** Plot of sound pressure spectrum in 1/3 Octave at 12.5 m/s

Figure C.15

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Appendix D
Tonality Assessment

Table D.01 Tonality Assessment Table - 7.5 m/s

Project: North Kent Wind Power Project - Turbine T36 - IEC 61400-11 Measurement
Report ID: 17283.01.T36.RP2

Created on: 2/22/2019

Measurement #	Centre frequency (Hz)	Background adjusted criterion level (dB)	Masking level (dB)	Tone level (dB)	Determination of tonality (dB)	Frequency dependent audibility criterion (dB)	Tonal Audibility (dB)
490	58	21.4	39.6	30.9	-8.7	-2.0	-6.7
463	58	18.6	36.9	31.8	-5.1	-2.0	-3.1
462	58	19.0	37.3	32.9	-4.3	-2.0	-2.3
497	62	19.1	37.3	33.6	-3.7	-2.0	-1.7
343	62	19.1	37.3	36.2	-1.1	-2.0	0.9
496	62	18.7	36.9	34.0	-2.9	-2.0	-0.9
350	63	20.5	38.8	37.3	-1.5	-2.0	0.5
349	63	20.3	38.5	36.0	-2.6	-2.0	-0.6
491	63	20.1	38.4	32.4	-6.0	-2.0	-4.0
501	63	20.7	38.9	33.2	-5.7	-2.0	-3.7
353	63	20.9	39.1	32.9	-6.3	-2.0	-4.3
342	64	19.6	37.8	32.2	-5.6	-2.0	-3.6
500	65	21.1	39.3	32.0	-7.3	-2.0	-5.3
510	65	20.1	38.3	32.4	-5.9	-2.0	-3.9
460	65	18.8	37.0	33.6	-3.4	-2.0	-1.4
461	65	18.8	37.1	31.7	-5.3	-2.0	-3.3
502	65	20.0	38.3	35.2	-3.1	-2.0	-1.1
498	66	20.3	38.5	32.4	-6.1	-2.0	-4.1
487	66	19.8	38.0	32.5	-5.5	-2.0	-3.5
492	66	19.4	37.7	31.9	-5.8	-2.0	-3.8
503	66	21.3	39.5	32.4	-7.1	-2.0	-5.1
459	66	20.8	39.0	34.7	-4.4	-2.0	-2.4
486	67	21.3	39.5	30.7	-8.8	-2.0	-6.8
489	67	20.8	39.1	33.2	-5.9	-2.0	-3.9
495	67	20.5	38.7	32.1	-6.6	-2.0	-4.6
Average	63.8				-4.7	-2.0	-2.7

Table D.02 Tonality Assessment Table - 8 m/s

Project: North Kent Wind Power Project - Turbine T36 - IEC 61400-11 Measurement
Report ID: 17283.01.T36.RP2

Created on: 2/22/2019

Measurement #	Centre frequency (Hz)	Background adjusted criterion level (dB)	Masking level (dB)	Tone level (dB)	Determination of tonality (dB)	Frequency dependent audibility criterion (dB)	Tonal Audibility (dB)
488	67	20.7	38.9	32.4	-6.5	-2.0	-4.5
458	68	21.3	39.6	33.6	-6.0	-2.0	-4.0
509	69	22.4	40.6	35.7	-4.9	-2.0	-2.9
308	69	20.5	38.8	39.3	0.5	-2.0	2.5
457	69	21.2	39.4	36.3	-3.1	-2.0	-1.1
316	69	22.9	41.1	36.7	-4.4	-2.0	-2.4
484	70	20.8	39.1	37.5	-1.6	-2.0	0.4
306	70	20.5	38.8	38.0	-0.8	-2.0	1.2
175	70	21.6	39.8	39.0	-0.9	-2.0	1.1
309	70	20.4	38.7	39.1	0.4	-2.0	2.4
315	70	22.4	40.6	38.5	-2.1	-2.0	-0.1
494	70	20.7	38.9	36.8	-2.1	-2.0	-0.1
356	70	22.3	40.5	38.6	-1.9	-2.0	0.1
310	70	20.9	39.2	38.7	-0.5	-2.0	1.5
317	70	22.0	40.3	36.5	-3.8	-2.0	-1.8
511	70	18.6	36.8	35.6	-1.2	-2.0	0.8
485	70	20.9	39.1	37.8	-1.3	-2.0	0.7
341	70	20.2	38.5	36.5	-2.0	-2.0	0.0
357	70	22.5	40.8	36.7	-4.0	-2.0	-2.0
162	71	22.6	40.9	38.3	-2.6	-2.0	-0.6
176	71	22.1	40.3	39.7	-0.7	-2.0	1.3
358	71	23.0	41.3	39.8	-1.5	-2.0	0.5
355	71	21.6	39.9	38.6	-1.2	-2.0	0.8
657	71	23.1	41.3	39.3	-2.1	-2.0	-0.1
331	71	21.8	40.1	38.2	-1.9	-2.0	0.1
340	71	20.8	39.0	38.4	-0.6	-2.0	1.4
589	73	24.6	42.9	36.2	-6.7	-2.0	-4.7
472	86	22.7	40.9	37.0	-3.9	-2.0	-1.9
Average	71				-2.0	-2.0	0.0

Table D.03 Tonality Assessment Table - 8.5 m/s

Project: North Kent Wind Power Project - Turbine T36 - IEC 61400-11 Measurement
Report ID: 17283.01.T36.RP2

Created on: 2/22/2019

Measurement #	Centre frequency (Hz)	Background adjusted criterion level (dB)	Masking level (dB)	Tone level (dB)	Determination of tonality (dB)	Frequency dependent audibility criterion (dB)	Tonal Audibility (dB)
654	58	23.8	42.1	36.9	-5.2	-2.0	-3.2
178	58	22.5	40.7	37.8	-2.9	-2.0	-0.9
655	58	23.9	42.1	36.8	-5.3	-2.0	-3.3
592	58	24.0	42.3	37.7	-4.5	-2.0	-2.5
160	69	23.1	41.3	35.0	-6.3	-2.0	-4.3
588	69	23.7	41.9	36.3	-5.7	-2.0	-3.7
483	69	20.1	38.3	36.5	-1.9	-2.0	0.1
305	69	21.3	39.6	37.7	-1.8	-2.0	0.2
302	69	19.6	37.8	36.5	-1.4	-2.0	0.6
314	69	20.7	38.9	38.0	-0.9	-2.0	1.1
591	69	24.4	42.7	35.6	-7.0	-2.0	-5.0
322	69	21.7	40.0	36.6	-3.4	-2.0	-1.4
656	70	23.6	41.9	39.3	-2.6	-2.0	-0.6
362	70	22.7	40.9	35.3	-5.6	-2.0	-3.6
454	70	21.4	39.6	37.9	-1.7	-2.0	0.3
312	70	20.8	39.0	38.1	-0.9	-2.0	1.1
473	70	19.7	37.9	37.4	-0.5	-2.0	1.5
330	70	20.9	39.2	37.3	-1.9	-2.0	0.1
508	70	21.4	39.6	38.0	-1.6	-2.0	0.4
504	70	20.3	38.6	37.7	-0.9	-2.0	1.1
658	70	24.5	42.7	38.1	-4.6	-2.0	-2.6
452	70	21.1	39.4	36.8	-2.5	-2.0	-0.5
397	70	22.5	40.7	37.5	-3.2	-2.0	-1.2
338	70	20.2	38.5	37.9	-0.6	-2.0	1.5
166	70	22.4	40.6	38.4	-2.2	-2.0	-0.2
301	70	19.2	37.5	37.4	-0.1	-2.0	1.9
336	70	20.9	39.2	37.7	-1.5	-2.0	0.5
475	70	21.8	40.0	37.9	-2.1	-2.0	-0.1
303	70	19.4	37.7	38.2	0.6	-2.0	2.6
156	70	20.2	38.4	37.6	-0.8	-2.0	1.2
507	70	22.7	40.9	38.4	-2.5	-2.0	-0.5
173	71	23.6	41.8	38.3	-3.6	-2.0	-1.6
332	71	21.9	40.1	37.7	-2.4	-2.0	-0.4
170	71	20.7	38.9	39.1	0.2	-2.0	2.2
334	71	20.7	38.9	36.9	-2.0	-2.0	0.0
333	71	20.7	38.9	37.8	-1.1	-2.0	0.9
493	71	20.4	38.7	36.7	-2.0	-2.0	0.0
339	71	19.6	37.8	38.3	0.4	-2.0	2.4
304	71	20.3	38.6	38.1	-0.5	-2.0	1.5
307	71	20.0	38.2	37.9	-0.3	-2.0	1.7
453	71	21.6	39.8	37.3	-2.5	-2.0	-0.5
171	71	22.2	40.4	38.6	-1.8	-2.0	0.2
313	71	19.3	37.5	37.4	-0.1	-2.0	1.9
168	71	20.8	39.1	38.6	-0.5	-2.0	1.5
366	71	23.0	41.2	38.0	-3.3	-2.0	-1.3
167	71	20.8	39.1	38.6	-0.5	-2.0	1.5
474	71	22.2	40.5	35.3	-5.1	-2.0	-3.1
163	71	22.9	41.1	37.7	-3.5	-2.0	-1.4
455	71	21.4	39.7	38.8	-0.9	-2.0	1.1
365	71	21.7	39.9	39.3	-0.7	-2.0	1.4
172	71	22.4	40.6	39.0	-1.6	-2.0	0.4
456	71	20.7	39.0	37.4	-1.6	-2.0	0.4
169	71	20.4	38.7	39.1	0.4	-2.0	2.4

476	72	22.0	40.3	35.1	-5.2	-2.0	-3.2
644	72	23.5	41.7	38.1	-3.6	-2.0	-1.6
311	72	21.7	40.0	38.1	-1.9	-2.0	0.1
590	74	23.8	42.1	37.8	-4.2	-2.0	-2.2
Average	70				-1.9	-2.0	0.1

Table D.04 Tonality Assessment Table - 9 m/s

Project: North Kent Wind Power Project - Turbine T36 - IEC 61400-11 Measurement
Report ID: 17283.01.T36.RP2

Created on: 2/22/2019

Measurement #	Centre frequency (Hz)	Background adjusted criterion level (dB)	Masking level (dB)	Tone level (dB)	Determination of tonality (dB)	Frequency dependent audibility criterion (dB)	Tonal Audibility (dB)
652	57	22.2	40.5	41.0	0.6	-2.0	2.6
586	58	25.4	43.6	35.5	-8.1	-2.0	-6.1
584	58	25.2	43.4	34.7	-8.7	-2.0	-6.7
164	58	23.7	42.0	35.0	-7.0	-2.0	-5.0
1021	68	25.8	44.0	32.1	-11.9	-2.0	-9.9
682	69	25.1	43.4	34.6	-8.8	-2.0	-6.8
299	69	18.4	36.6	38.6	2.0	-2.0	4.0
558	69	22.4	40.7	38.5	-2.2	-2.0	-0.2
450	69	19.4	37.6	37.7	0.1	-2.0	2.1
660	69	24.1	42.4	37.4	-5.0	-2.0	-3.0
585	69	24.3	42.5	38.7	-3.9	-2.0	-1.8
296	69	20.7	39.0	38.8	-0.2	-2.0	1.8
947	69	26.6	44.8	36.3	-8.6	-2.0	-6.6
326	69	18.7	36.9	38.8	1.9	-2.0	3.9
643	69	22.2	40.5	38.0	-2.5	-2.0	-0.5
817	69	23.1	41.3	37.1	-4.3	-2.0	-2.3
818	69	23.4	41.7	39.6	-2.1	-2.0	-0.1
587	69	25.1	43.4	36.4	-7.0	-2.0	-5.0
300	69	19.4	37.6	38.5	0.8	-2.0	2.8
952	69	24.0	42.3	36.1	-6.1	-2.0	-4.1
428	70	20.4	38.7	37.9	-0.8	-2.0	1.2
819	70	23.1	41.3	40.2	-1.1	-2.0	0.9
482	70	19.9	38.1	38.3	0.3	-2.0	2.3
263	70	21.4	39.6	38.5	-1.1	-2.0	0.9
506	70	21.2	39.4	37.1	-2.4	-2.0	-0.3
445	70	20.4	38.6	38.2	-0.4	-2.0	1.6
479	70	19.3	37.5	38.1	0.6	-2.0	2.6
327	70	19.0	37.2	39.4	2.2	-2.0	4.2
559	70	22.6	40.9	40.1	-0.7	-2.0	1.3
385	70	21.5	39.7	37.8	-1.9	-2.0	0.1
67	70	22.5	40.7	38.8	-1.9	-2.0	0.1
653	70	22.3	40.6	39.6	-1.0	-2.0	1.0
320	70	20.6	38.9	39.4	0.5	-2.0	2.5
505	70	18.5	36.8	38.2	1.4	-2.0	3.4
446	70	19.5	37.7	38.3	0.6	-2.0	2.6
321	70	21.6	39.8	37.9	-1.9	-2.0	0.2
39	70	21.5	39.8	37.8	-1.9	-2.0	0.1
451	70	20.8	39.0	38.4	-0.6	-2.0	1.4
325	70	20.2	38.5	39.3	0.8	-2.0	2.8
298	70	18.8	37.0	38.8	1.8	-2.0	3.8
443	70	20.9	39.1	37.4	-1.7	-2.0	0.3
182	70	24.1	42.3	37.7	-4.6	-2.0	-2.6
594	71	23.8	42.0	39.3	-2.7	-2.0	-0.7
659	71	23.3	41.6	37.8	-3.8	-2.0	-1.8
159	71	22.1	40.4	39.4	-0.9	-2.0	1.1
862	71	24.2	42.5	38.9	-3.5	-2.0	-1.5
386	71	21.2	39.4	39.4	-0.1	-2.0	1.9
68	71	22.1	40.3	39.7	-0.6	-2.0	1.4
361	71	22.9	41.2	39.1	-2.1	-2.0	0.0
421	71	19.8	38.1	38.7	0.7	-2.0	2.7
425	71	20.5	38.7	39.2	0.4	-2.0	2.4
478	71	19.5	37.7	37.0	-0.7	-2.0	1.3
157	71	21.8	40.0	37.9	-2.1	-2.0	-0.1

422	71	20.5	38.7	38.1	-0.6	-2.0	1.4
174	71	21.6	39.8	38.3	-1.5	-2.0	0.5
323	71	20.0	38.3	37.8	-0.5	-2.0	1.5
329	71	21.6	39.9	38.5	-1.4	-2.0	0.6
364	71	21.9	40.1	38.9	-1.2	-2.0	0.8
328	71	20.4	38.6	38.1	-0.5	-2.0	1.5
424	72	19.8	38.0	39.2	1.1	-2.0	3.1
549	72	24.4	42.7	33.6	-9.0	-2.0	-7.0
359	72	20.5	38.7	39.2	0.5	-2.0	2.5
593	72	23.5	41.8	38.1	-3.6	-2.0	-1.6
318	72	21.0	39.3	38.2	-1.1	-2.0	0.9
158	72	22.6	40.8	38.7	-2.2	-2.0	-0.2
387	72	24.0	42.3	38.7	-3.6	-2.0	-1.6
447	72	19.6	37.9	38.3	0.4	-2.0	2.4
477	72	21.3	39.6	37.3	-2.3	-2.0	-0.3
337	72	20.8	39.1	38.1	-1.0	-2.0	1.0
363	72	21.7	39.9	39.8	-0.2	-2.0	1.8
335	72	20.5	38.8	36.7	-2.1	-2.0	-0.1
423	72	19.6	37.9	37.9	0.0	-2.0	2.0
821	73	25.1	43.3	36.6	-6.7	-2.0	-4.7
165	74	24.1	42.4	38.3	-4.0	-2.0	-2.0
Average	70				-1.2	-2.0	0.8

Table D.05 Tonality Assessment Table - 9.5 m/s

Project: North Kent Wind Power Project - Turbine T36 - IEC 61400-11 Measurement
Report ID: 17283.01.T36.RP2

Created on: 2/22/2019

Measurement #	Centre frequency (Hz)	Background adjusted criterion level (dB)	Masking level (dB)	Tone level (dB)	Determination of tonality (dB)	Frequency dependent audibility criterion (dB)	Tonal Audibility (dB)
861	58	25.3	43.6	35.1	-8.4	-2.0	-6.4
583	58	23.5	41.7	37.7	-4.1	-2.0	-2.1
181	58	22.2	40.4	35.8	-4.6	-2.0	-2.6
946	58	27.2	45.4	33.8	-11.6	-2.0	-9.6
651	63	24.6	42.8	37.4	-5.4	-2.0	-3.4
288	69	20.2	38.4	38.1	-0.3	-2.0	1.7
152	69	19.0	37.2	37.8	0.5	-2.0	2.5
151	69	19.9	38.1	38.0	-0.1	-2.0	1.9
282	69	22.3	40.6	37.0	-3.6	-2.0	-1.6
286	69	19.4	37.6	36.7	-0.9	-2.0	1.1
825	69	26.2	44.5	36.0	-8.5	-2.0	-6.5
639	69	23.4	41.7	38.7	-2.9	-2.0	-0.9
372	69	22.8	41.0	37.5	-3.5	-2.0	-1.5
153	69	19.0	37.2	37.7	0.5	-2.0	2.5
642	69	22.6	40.9	38.5	-2.4	-2.0	-0.4
556	69	23.9	42.1	36.5	-5.6	-2.0	-3.6
295	69	20.0	38.2	37.2	-1.0	-2.0	1.0
411	69	19.4	37.7	38.2	0.5	-2.0	2.5
259	69	20.9	39.2	37.3	-1.8	-2.0	0.2
637	69	21.6	39.8	39.0	-0.9	-2.0	1.1
261	69	21.3	39.5	38.0	-1.5	-2.0	0.5
155	69	19.4	37.7	37.5	-0.2	-2.0	1.8
114	69	20.7	39.0	37.4	-1.6	-2.0	0.4
419	69	19.2	37.4	37.5	0.1	-2.0	2.1
1010	69	24.3	42.5	35.5	-7.0	-2.0	-5.0
681	69	24.2	42.4	34.4	-8.0	-2.0	-6.0
258	69	20.7	39.0	36.3	-2.7	-2.0	-0.7
293	69	18.7	37.0	37.3	0.4	-2.0	2.4
636	69	26.0	44.2	34.2	-10.0	-2.0	-8.0
688	69	23.7	42.0	37.5	-4.5	-2.0	-2.5
566	69	25.2	43.4	36.7	-6.8	-2.0	-4.8
384	70	21.6	39.8	37.5	-2.3	-2.0	-0.3
294	70	18.5	36.7	37.6	0.9	-2.0	2.9
689	70	22.5	40.7	37.4	-3.3	-2.0	-1.3
783	70	25.3	43.5	38.0	-5.5	-2.0	-3.5
641	70	24.4	42.7	37.3	-5.4	-2.0	-3.4
142	70	20.4	38.6	37.3	-1.3	-2.0	0.7
154	70	20.0	38.3	38.7	0.4	-2.0	2.4
638	70	21.9	40.1	38.5	-1.7	-2.0	0.4
412	70	19.0	37.2	38.3	1.2	-2.0	3.2
431	70	21.1	39.3	38.2	-1.1	-2.0	0.9
546	70	25.0	43.3	34.7	-8.5	-2.0	-6.5
547	70	23.5	41.7	37.7	-4.0	-2.0	-2.0
440	70	20.6	38.8	37.7	-1.1	-2.0	0.9
481	70	19.2	37.5	37.9	0.4	-2.0	2.4
260	70	22.5	40.7	34.4	-6.3	-2.0	-4.3
297	70	20.1	38.3	38.3	0.0	-2.0	2.0
782	70	23.4	41.6	37.5	-4.1	-2.0	-2.1
430	70	21.6	39.8	38.8	-1.0	-2.0	1.0
144	70	21.5	39.7	38.0	-1.7	-2.0	0.3
271	70	21.1	39.3	35.9	-3.4	-2.0	-1.4
115	70	22.4	40.7	38.9	-1.8	-2.0	0.2
256	70	19.5	37.7	36.9	-0.8	-2.0	1.2

Table D.05 Tonality Assessment Table - 9.5 m/s

Project: North Kent Wind Power Project - Turbine T36 - IEC 61400-11 Measurement
Report ID: 17283.01.T36.RP2

Created on: 2/22/2019

Measurement #	Centre frequency (Hz)	Background adjusted criterion level (dB)	Masking level (dB)	Tone level (dB)	Determination of tonality (dB)	Frequency dependent audibility criterion (dB)	Tonal Audibility (dB)
449	70	18.4	36.7	38.1	1.4	-2.0	3.4
661	70	23.2	41.4	38.2	-3.2	-2.0	-1.2
560	70	22.9	41.2	37.3	-3.8	-2.0	-1.8
292	70	18.9	37.1	37.1	0.0	-2.0	2.0
420	70	19.2	37.5	37.8	0.3	-2.0	2.3
287	70	19.7	38.0	37.5	-0.5	-2.0	1.5
35	70	20.7	38.9	38.4	-0.5	-2.0	1.5
951	70	26.7	45.0	36.0	-9.0	-2.0	-7.0
38	71	21.2	39.4	38.6	-0.9	-2.0	1.1
441	71	20.1	38.3	38.0	-0.3	-2.0	1.7
400	71	19.5	37.7	38.0	0.3	-2.0	2.3
683	71	23.5	41.8	38.2	-3.5	-2.0	-1.5
389	71	22.8	41.0	37.0	-4.0	-2.0	-2.0
40	71	22.2	40.5	39.4	-1.1	-2.0	0.9
143	71	20.5	38.8	37.5	-1.3	-2.0	0.7
396	71	21.3	39.5	38.6	-1.0	-2.0	1.0
390	71	21.7	40.0	39.4	-0.6	-2.0	1.4
145	71	22.2	40.4	38.7	-1.7	-2.0	0.3
550	71	24.9	43.2	37.9	-5.3	-2.0	-3.3
395	71	21.5	39.7	38.5	-1.2	-2.0	0.8
551	71	23.5	41.7	36.7	-5.0	-2.0	-3.0
415	71	18.6	36.9	39.1	2.3	-2.0	4.3
442	71	19.4	37.7	38.1	0.4	-2.0	2.4
255	71	22.5	40.7	37.8	-3.0	-2.0	-1.0
36	71	21.5	39.7	38.6	-1.1	-2.0	0.9
398	71	20.2	38.5	39.3	0.9	-2.0	2.9
324	71	19.9	38.1	37.4	-0.7	-2.0	1.3
820	72	24.3	42.6	39.7	-2.9	-2.0	-0.8
416	72	18.5	36.8	38.1	1.3	-2.0	3.3
826	72	25.6	43.8	35.6	-8.2	-2.0	-6.2
69	72	22.6	40.8	38.6	-2.2	-2.0	-0.2
367	72	23.0	41.2	38.4	-2.8	-2.0	-0.8
429	72	21.4	39.7	39.1	-0.6	-2.0	1.4
37	72	22.1	40.3	39.0	-1.3	-2.0	0.7
360	72	21.7	40.0	38.4	-1.6	-2.0	0.4
388	72	22.3	40.5	38.0	-2.5	-2.0	-0.5
444	72	19.9	38.2	38.9	0.7	-2.0	2.7
319	72	19.9	38.1	38.1	-0.1	-2.0	1.9
480	72	19.3	37.5	37.4	-0.1	-2.0	1.9
146	72	22.5	40.7	37.8	-2.9	-2.0	-0.9
414	72	19.3	37.5	39.4	1.9	-2.0	3.9
448	72	19.3	37.6	37.7	0.1	-2.0	2.1
427	73	20.8	39.1	38.0	-1.1	-2.0	0.9
548	73	25.7	43.9	35.1	-8.8	-2.0	-6.8
687	73	26.2	44.4	32.8	-11.6	-2.0	-9.6
561	73	26.1	44.3	34.0	-10.3	-2.0	-8.3
262	73	21.4	39.7	36.3	-3.4	-2.0	-1.4
413	74	20.6	38.9	38.2	-0.6	-2.0	1.4
557	74	23.9	42.1	37.8	-4.4	-2.0	-2.4
645	74	24.6	42.9	39.7	-3.2	-2.0	-1.2
426	74	20.5	38.8	38.4	-0.4	-2.0	1.6
Average	70				-1.7	-2.0	0.3

Table D.06 Tonality Assessment Table - 10 m/s

Project: North Kent Wind Power Project - Turbine T36 - IEC 61400-11 Measurement
Report ID: 17283.01.T36.RP2

Created on: 2/22/2019

Measurement #	Centre frequency (Hz)	Background adjusted criterion level (dB)	Masking level (dB)	Tone level (dB)	Determination of tonality (dB)	Frequency dependent audibility criterion (dB)	Tonal Audibility (dB)
604	58	24.0	42.2	30.2	-12.0	-2.0	-10.0
596	58	23.9	42.1	35.4	-6.7	-2.0	-4.7
663	58	23.6	41.9	37.7	-4.2	-2.0	-2.2
148	58	19.6	37.9	36.2	-1.6	-2.0	0.4
106	58	21.5	39.8	33.2	-6.6	-2.0	-4.6
133	58	20.4	38.7	34.1	-4.6	-2.0	-2.6
254	58	21.9	40.1	36.3	-3.9	-2.0	-1.9
680	58	24.7	43.0	34.5	-8.5	-2.0	-6.5
669	58	25.2	43.4	36.8	-6.6	-2.0	-4.6
695	58	23.4	41.7	34.9	-6.8	-2.0	-4.8
640	58	21.7	39.9	38.5	-1.5	-2.0	0.5
816	58	23.8	42.0	37.7	-4.3	-2.0	-2.3
140	58	22.3	40.5	35.4	-5.1	-2.0	-3.1
257	69	21.1	39.3	36.7	-2.6	-2.0	-0.6
270	69	20.3	38.6	35.0	-3.6	-2.0	-1.6
113	69	19.2	37.5	35.8	-1.7	-2.0	0.3
379	69	21.4	39.6	36.4	-3.3	-2.0	-1.3
150	69	19.7	37.9	36.5	-1.4	-2.0	0.6
1028	69	25.2	43.4	33.8	-9.6	-2.0	-7.6
524	69	27.9	46.1	34.1	-11.9	-2.0	-9.9
1008	69	22.5	40.7	36.3	-4.4	-2.0	-2.4
595	69	22.9	41.2	37.9	-3.3	-2.0	-1.3
283	69	18.9	37.1	37.0	-0.1	-2.0	1.9
1007	69	23.5	42	36	-5.5	-2.0	-3.5
607	69	22.7	40.9	37.4	-3.5	-2.0	-1.5
281	69	20.3	38.5	34.5	-4.0	-2.0	-2.0
603	69	23.6	41.8	35.7	-6.1	-2.0	-4.1
291	69	18.9	37.1	35.8	-1.4	-2.0	0.6
273	69	20.0	38.2	35.8	-2.4	-2.0	-0.4
64	69	20.6	38.8	36.5	-2.4	-2.0	-0.4
781	69	22.8	41.0	37.6	-3.4	-2.0	-1.4
984	69	24.0	42.2	32.1	-10.2	-2.0	-8.2
1009	69	22.7	40.9	37.1	-3.8	-2.0	-1.8
371	70	22.9	41.1	33.4	-7.7	-2.0	-5.7
272	70	20.1	38.3	36.3	-2.1	-2.0	-0.1
280	70	21.7	39.9	34.0	-5.9	-2.0	-3.9
438	70	21.0	39.2	35.8	-3.4	-2.0	-1.4
65	70	21.9	40.2	36.7	-3.5	-2.0	-1.5
405	70	20.8	39.0	34.4	-4.6	-2.0	-2.6
75	70	21.9	40.2	35.8	-4.3	-2.0	-2.3
34	70	19.9	38.1	35.6	-2.5	-2.0	-0.5
664	70	24.0	42.2	39.5	-2.8	-2.0	-0.8
274	70	20.8	39.0	35.8	-3.2	-2.0	-1.2
71	70	19.9	38.2	37.8	-0.4	-2.0	1.6
66	70	21.6	39.8	36.9	-2.9	-2.0	-0.9
858	70	26.4	44.6	37.0	-7.6	-2.0	-5.6
285	70	20.2	38.5	35.0	-3.4	-2.0	-1.4
394	70	21.6	39.8	34.1	-5.7	-2.0	-3.7
439	70	19.5	37.8	36.1	-1.7	-2.0	0.3
97	70	21.7	39.9	35.5	-4.4	-2.0	-2.4
983	70	24.8	43.0	31.0	-12.1	-2.0	-10.1
410	70	19.0	37.2	35.6	-1.6	-2.0	0.4
418	71	18.6	36.9	36.3	-0.6	-2.0	1.4
662	71	21.8	40.1	38.3	-1.8	-2.0	0.2

Table D.06 Tonality Assessment Table - 10 m/s

Project: North Kent Wind Power Project - Turbine T36 - IEC 61400-11 Measurement
Report ID: 17283.01.T36.RP2

Measurement #	Centre frequency (Hz)	Background adjusted criterion level (dB)	Masking level (dB)	Tone level (dB)	Determination of tonality (dB)	Frequency dependent audibility criterion (dB)	Tonal Audibility (dB)
149	71	20.7	39.0	37.5	-1.5	-2.0	0.5
380	71	21.6	39.8	35.9	-4.0	-2.0	-2.0
134	71	20.9	39.2	37.3	-1.9	-2.0	0.1
98	71	20.5	38.7	37.4	-1.3	-2.0	0.7
46	71	22.3	40.6	36.6	-4.0	-2.0	-2.0
401	71	19.1	37.4	38.0	0.6	-2.0	2.6
399	72	20.7	38.9	38.4	-0.6	-2.0	1.4
822	72	25.4	43.6	35.8	-7.8	-2.0	-5.8
368	72	22.5	40.7	36.5	-4.2	-2.0	-2.2
417	72	18.6	36.8	38.4	1.6	-2.0	3.6
552	72	22.4	40.6	37.5	-3.1	-2.0	-1.1
784	72	24.5	42.7	38.0	-4.7	-2.0	-2.7
70	73	21.0	39.2	37.9	-1.3	-2.0	0.7
179	74	21.5	39.8	37.6	-2.2	-2.0	-0.2
Average	68				-3.2	-2.0	-1.2

Table D.07 Tonality Assessment Table - 10.5 m/s

Project: North Kent Wind Power Project - Turbine T36 - IEC 61400-11 Measurement
Report ID: 17283.01.T36.RP2

Created on: 2/22/2019

Measurement #	Centre frequency (Hz)	Background adjusted criterion level (dB)	Masking level (dB)	Tone level (dB)	Determination of tonality (dB)	Frequency dependent audibility criterion (dB)	Tonal Audibility (dB)
32	57	20.0	38.2	36.2	-2.0	-2.0	0.0
15	58	18.7	36.9	32.7	-4.2	-2.0	-2.2
96	58	21.0	39.2	33.2	-6.0	-2.0	-4.0
199	58	17.0	35.2	34.8	-0.4	-2.0	1.6
543	58	26.4	44.7	32.6	-12.1	-2.0	-10.1
200	58	17.4	35.7	31.6	-4.0	-2.0	-2.0
74	58	20.8	39.0	34.4	-4.6	-2.0	-2.6
84	58	20.1	38.3	34.2	-4.1	-2.0	-2.1
198	58	17.7	35.9	35.8	-0.1	-2.0	1.9
16	58	19.7	37.9	34.9	-3.0	-2.0	-1.0
191	58	19.3	37.5	35.3	-2.2	-2.0	-0.2
78	58	20.0	38.2	36.4	-1.9	-2.0	0.1
103	58	20.5	38.7	32.2	-6.5	-2.0	-4.5
12	58	19.1	37.3	32.7	-4.7	-2.0	-2.7
30	58	18.7	36.9	34.1	-2.8	-2.0	-0.8
107	58	21.2	39.5	35.6	-3.9	-2.0	-1.9
1	58	22.3	40.5	32.8	-7.7	-2.0	-5.7
203	58	18.2	36.4	34.0	-2.4	-2.0	-0.4
90	58	19.2	37.5	35.7	-1.8	-2.0	0.2
188	58	19.4	37.6	31.8	-5.9	-2.0	-3.9
185	58	20.7	39.0	32.8	-6.1	-2.0	-4.1
79	58	19.8	38.0	35.0	-3.1	-2.0	-1.1
186	58	21.1	39.4	32.8	-6.5	-2.0	-4.5
47	58	20.5	38.8	33.2	-5.6	-2.0	-3.6
108	58	22.1	40.3	33.1	-7.2	-2.0	-5.2
89	58	17.7	35.9	33.9	-2.0	-2.0	0.0
91	58	19.3	37.5	34.3	-3.2	-2.0	-1.2
184	58	20.7	39.0	34.5	-4.5	-2.0	-2.5
4	69	20.1	38.3	34.5	-3.8	-2.0	-1.8
275	69	21.4	39.7	35.8	-3.9	-2.0	-1.9
542	69	24.5	42.7	38.4	-4.3	-2.0	-2.3
63	69	20.3	38.6	35.0	-3.6	-2.0	-1.6
780	69	25.5	43.7	37.2	-6.5	-2.0	-4.5
290	70	20.4	38.6	32.1	-6.5	-2.0	-4.5
289	70	20.6	38.9	34.9	-4.0	-2.0	-2.0
24	70	18.8	37.1	34.0	-3.0	-2.0	-1.0
86	70	17.6	35.8	35.2	-0.6	-2.0	1.4
433	71	19.6	37.9	33.8	-4.1	-2.0	-2.1
180	71	22.5	40.8	34.8	-6.0	-2.0	-4.0
42	71	21.9	40.2	36.0	-4.1	-2.0	-2.1
41	71	21.8	40.0	37.9	-2.1	-2.0	-0.1
408	71	18.3	36.6	33.5	-3.0	-2.0	-1.0
406	71	19.1	37.3	35.2	-2.1	-2.0	-0.1
393	71	20.2	38.4	33.6	-4.8	-2.0	-2.8
83	71	17.8	36.1	35.6	-0.4	-2.0	1.6
45	71	21.7	39.9	33.8	-6.1	-2.0	-4.1
94	71	19.6	37.8	35.5	-2.3	-2.0	-0.3
432	71	19.4	37.7	36.6	-1.0	-2.0	1.0
93	71	20.1	38.4	33.8	-4.6	-2.0	-2.6
381	71	22.2	40.5	35.4	-5.0	-2.0	-3.0
276	72	19.7	37.9	33.1	-4.8	-2.0	-2.8
81	72	20.8	39.1	33.8	-5.3	-2.0	-3.3
123	72	18.2	36.5	35.7	-0.7	-2.0	1.3
190	72	18.9	37.2	35.1	-2.1	-2.0	-0.1

Table D.07 Tonality Assessment Table - 10.5 m/s

Project: North Kent Wind Power Project - Turbine T36 - IEC 61400-11 Measurement
Report ID: 17283.01.T36.RP2

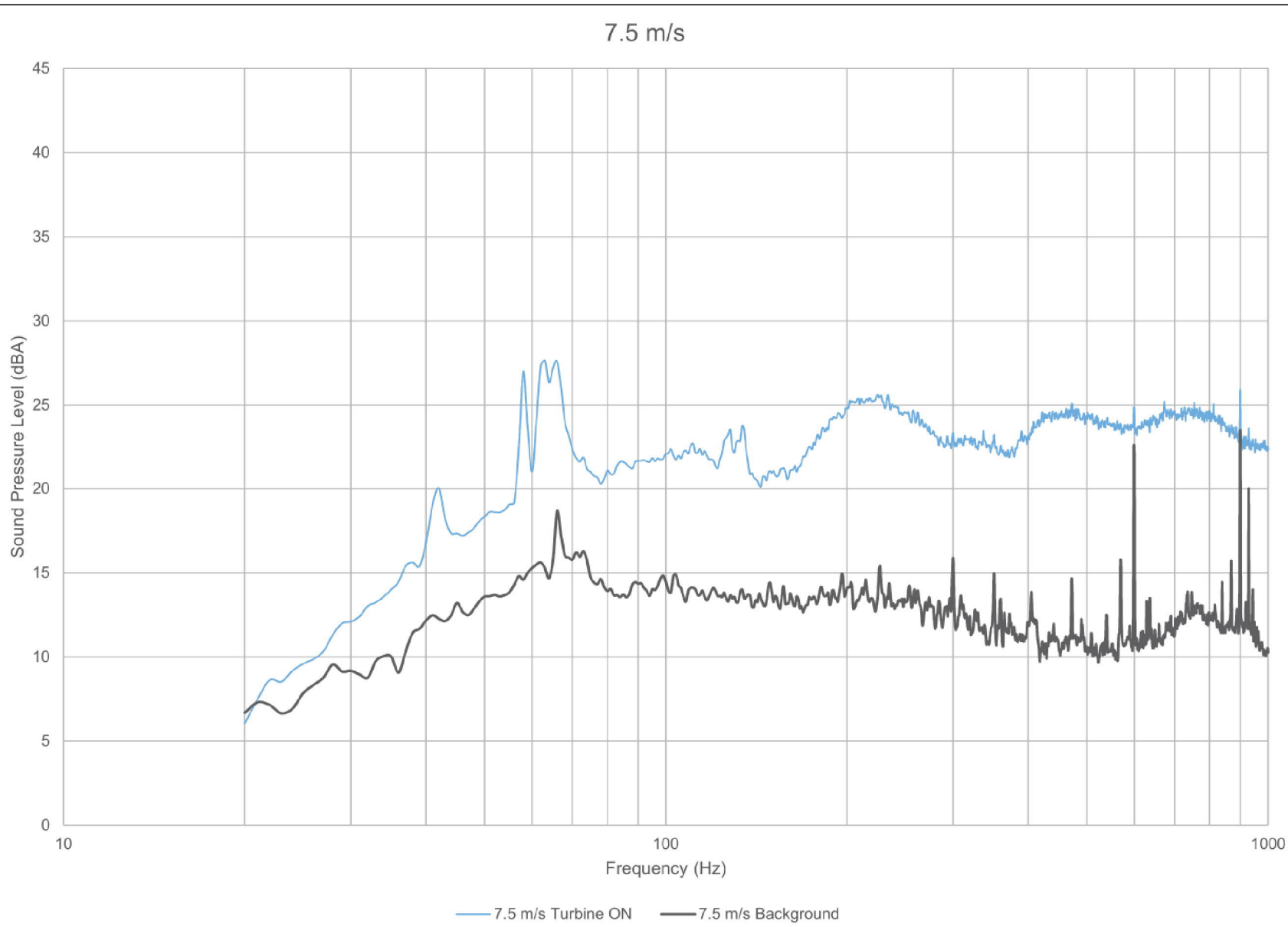
Measurement #	Centre frequency (Hz)	Background adjusted criterion level (dB)	Masking level (dB)	Tone level (dB)	Determination of tonality (dB)	Frequency dependent audibility criterion (dB)	Tonal Audibility (dB)
2	72	20.0	38.3	35.3	-3.0	-2.0	-0.9
122	72	18.9	37.1	34.2	-3.0	-2.0	-1.0
109	72	22.4	40.7	35.9	-4.8	-2.0	-2.8
111	72	17.5	35.8	32.8	-3.0	-2.0	-1.0
863	72	23.2	41.4	38.7	-2.7	-2.0	-0.7
392	73	19.4	37.6	35.3	-2.3	-2.0	-0.3
944	78	23.2	41.4	31.4	-10.0	-2.0	-8.0
633	78	24.8	43.1	31.3	-11.8	-2.0	-9.8
574	78	23.3	41.5	33.0	-8.5	-2.0	-6.5
804	78	23.9	42.1	31.0	-11.2	-2.0	-9.1
573	78	21.8	40.1	31.4	-8.7	-2.0	-6.7
786	78	24.1	42.4	33.9	-8.4	-2.0	-6.4
801	78	22.5	40.7	34.8	-6.0	-2.0	-4.0
809	78	24.6	42.8	31.3	-11.5	-2.0	-9.5
Average	66				-3.8	-2.0	-1.8

Table D.08 Tonality Assessment Table - 11 m/s

Project: North Kent Wind Power Project - Turbine T36 - IEC 61400-11 Measurement
Report ID: 17283.01.T36.RP2

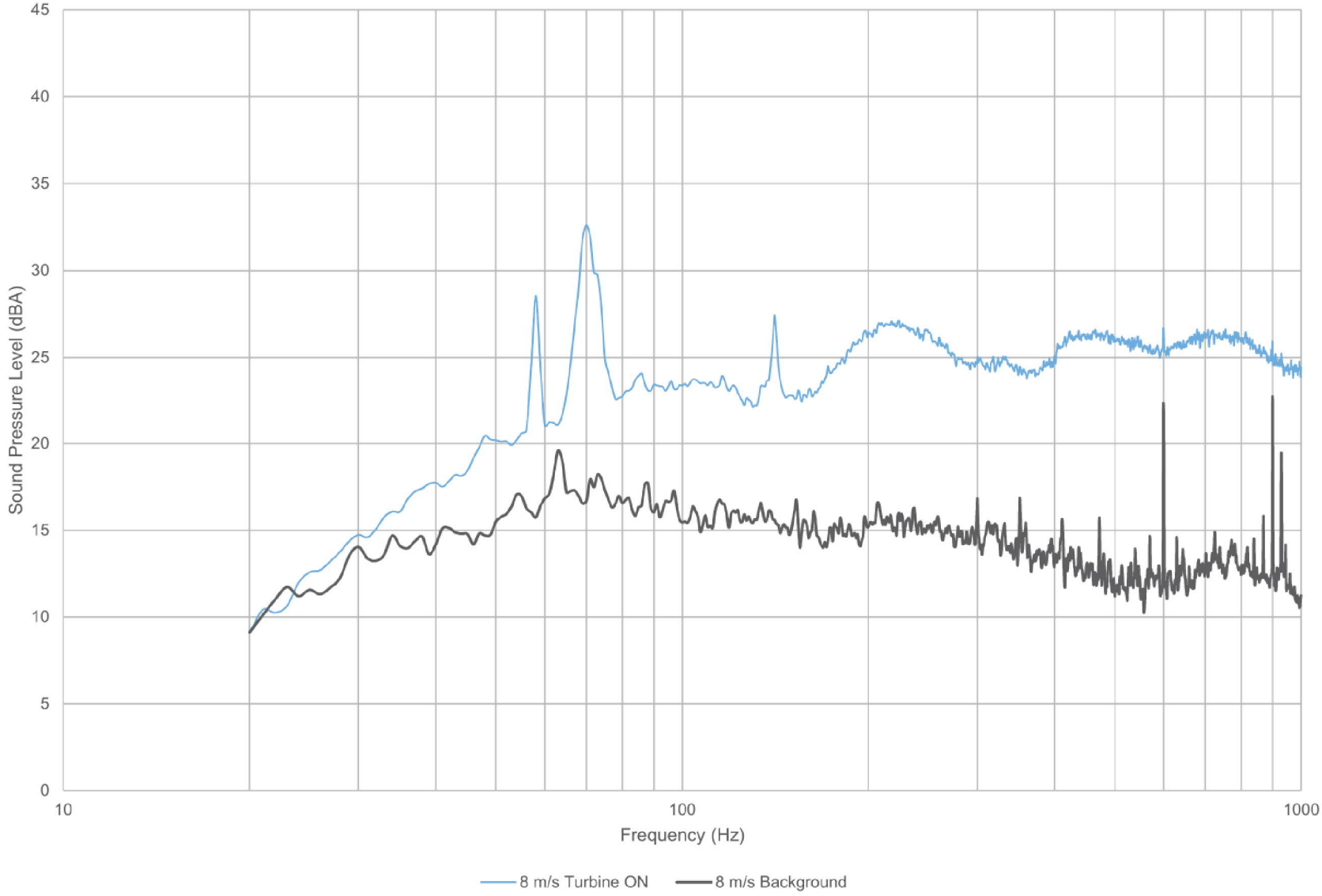
Created on: 2/22/2019

Measurement #	Centre frequency (Hz)	Background adjusted criterion level (dB)	Masking level (dB)	Tone level (dB)	Determination of tonality (dB)	Frequency dependent audibility criterion (dB)	Tonal Audibility (dB)
104	58	20.7	39.0	34.9	-4.1	-2.0	-2.1
668	58	24.5	42.8	32.1	-10.6	-2.0	-8.6
189	58	18.7	36.9	33.7	-3.2	-2.0	-1.2
3	58	19.1	37.3	33.1	-4.2	-2.0	-2.2
10	58	19.0	37.2	33.2	-4.0	-2.0	-2.0
121	58	17.5	35.7	31.5	-4.2	-2.0	-2.2
949	58	26.6	44.8	32.7	-12.1	-2.0	-10.1
11	58	17.7	36.0	33.8	-2.2	-2.0	-0.2
28	58	21.3	39.5	33.2	-6.3	-2.0	-4.3
26	58	18.7	37.0	34.1	-2.9	-2.0	-0.9
50	58	18.2	36.4	34.5	-1.9	-2.0	0.1
124	58	17.5	35.7	36.6	0.8	-2.0	2.8
613	58	22.8	41.0	31.2	-9.9	-2.0	-7.9
671	58	24.5	42.7	34.5	-8.2	-2.0	-6.2
20	58	19.2	37.5	35.4	-2.1	-2.0	-0.1
8	58	19.3	37.5	32.4	-5.1	-2.0	-3.1
60	58	18.9	37.2	33.7	-3.5	-2.0	-1.5
19	58	20.7	39.0	31.9	-7.1	-2.0	-5.1
187	58	21.0	39.2	32.7	-6.5	-2.0	-4.5
119	58	19.2	37.4	31.9	-5.5	-2.0	-3.5
14	58	19.5	37.7	32.5	-5.2	-2.0	-3.2
59	58	18.6	36.9	34.7	-2.1	-2.0	-0.1
843	58	24.6	42.8	34.6	-8.2	-2.0	-6.2
73	58	21.1	39.3	33.4	-5.9	-2.0	-3.9
131	58	18.7	37.0	33.2	-3.7	-2.0	-1.7
53	58	17.3	35.6	35.4	-0.1	-2.0	1.9
127	58	16.3	34.6	34.3	-0.3	-2.0	1.7
128	58	16.9	35.1	33.6	-1.5	-2.0	0.5
625	58	22.3	40.5	34.8	-5.8	-2.0	-3.8
126	60	18.9	37.2	38.0	0.9	-2.0	2.9
1040	69	26.2	44.4	34.6	-9.9	-2.0	-7.9
635	69	23.7	41.9	35.3	-6.6	-2.0	-4.6
52	69	19.0	37.3	36.8	-0.5	-2.0	1.5
580	69	22.2	40.5	37.7	-2.8	-2.0	-0.8
13	69	20.0	38.2	35.2	-3.0	-2.0	-1.0
523	69	24.5	42.7	38.5	-4.3	-2.0	-2.3
941	69	23.3	41.5	35.1	-6.5	-2.0	-4.4
378	69	20.6	38.9	34.3	-4.5	-2.0	-2.5
520	69	24.1	42.4	36.9	-5.4	-2.0	-3.4
938	69	25.9	44.1	38.3	-5.9	-2.0	-3.9
1006	70	23.4	41.6	34.0	-7.6	-2.0	-5.6
87	70	17.7	36.0	36.0	0.1	-2.0	2.1
407	70	18.7	36.9	33.6	-3.4	-2.0	-1.4
536	70	20.9	39.1	35.0	-4.2	-2.0	-2.2
996	71	25.4	43.6	33.4	-10.2	-2.0	-8.2
541	71	25.9	44.1	34.9	-9.2	-2.0	-7.2
694	71	22.6	40.8	35.0	-5.8	-2.0	-3.8
402	71	19.4	37.6	34.8	-2.8	-2.0	-0.8
43	71	21.8	40.1	33.5	-6.6	-2.0	-4.6
529	71	22.6	40.9	36.5	-4.4	-2.0	-2.4
987	71	25.9	44.2	32.2	-12.0	-2.0	-10.0
540	71	23.5	41.8	33.6	-8.2	-2.0	-6.2
95	71	20.6	38.9	33.7	-5.2	-2.0	-3.2
374	71	20.8	39.0	33.6	-5.4	-2.0	-3.4



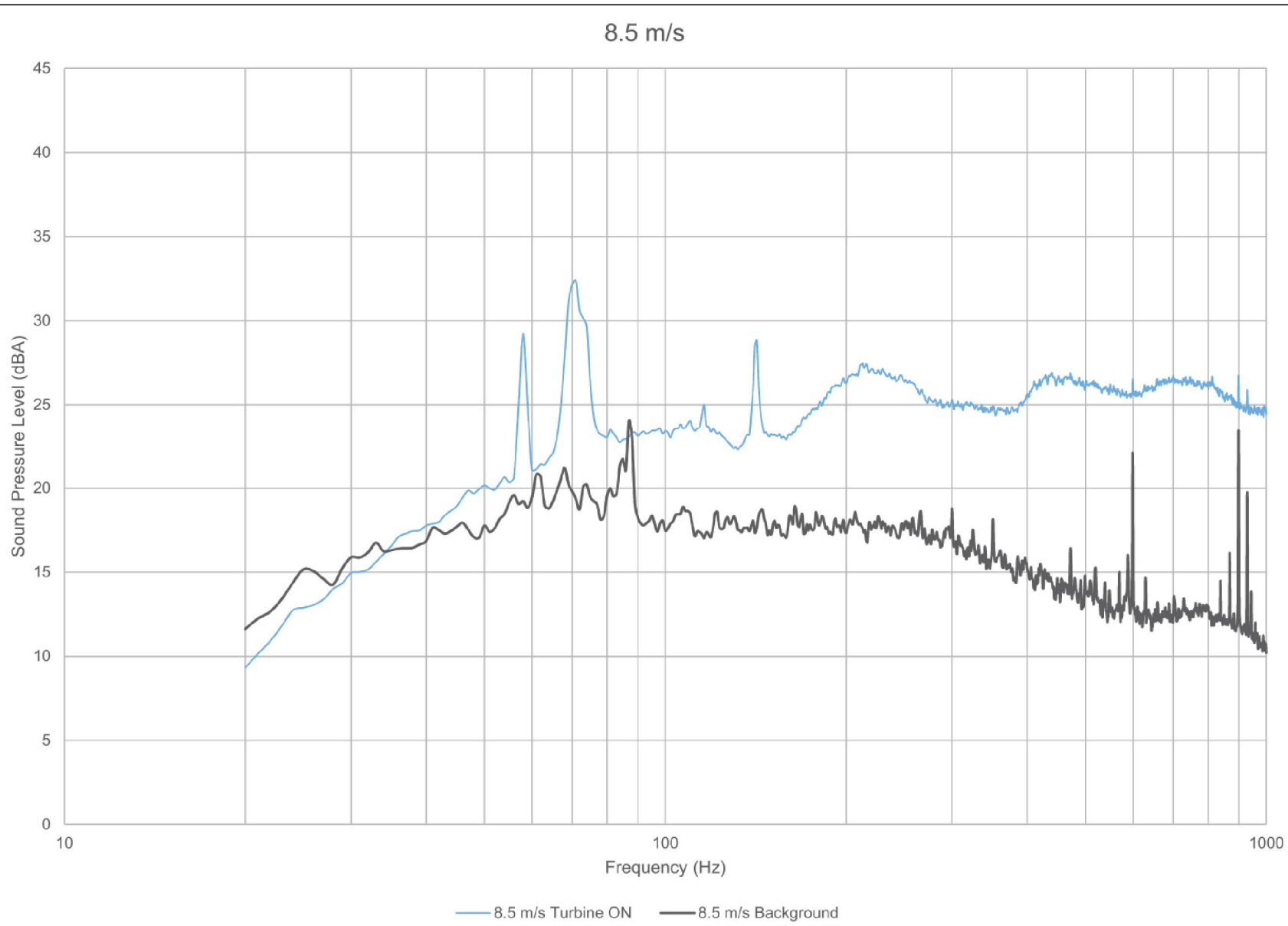
aercoustics	17283.01.T36.RP2 Scale: NTS Drawn by: DEA Reviewed by: MAD Date: Feb 2019 Revision: 1	**Project Name** North Kent Wind Power Project - IEC 61400-11 Edition 3.0 - Turbine T36 **Figure Title** Plot of narrow band spectra - Turbine ON vs. Background at 7.5 m/s

Figure D.01



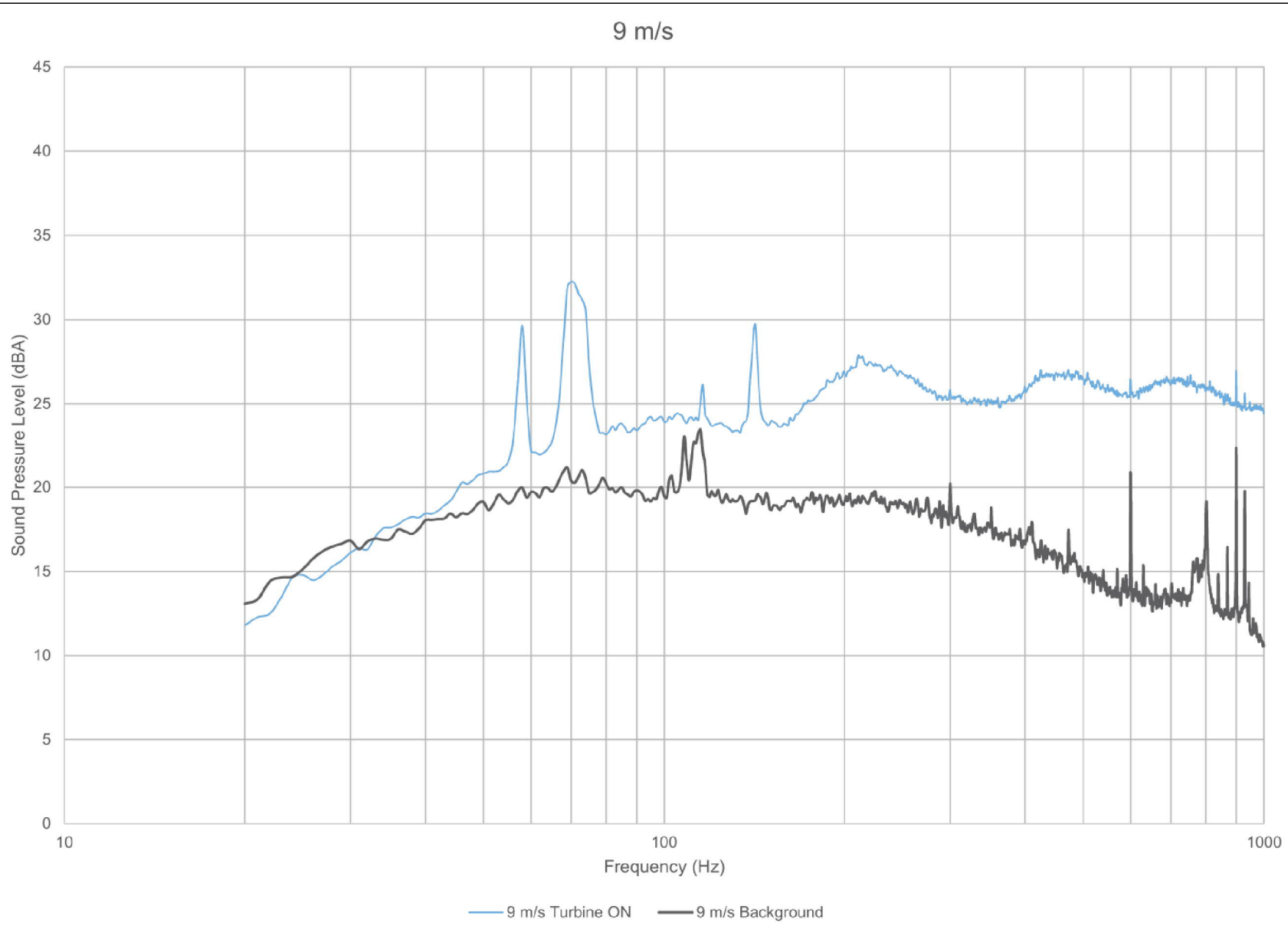
aercoustics	17283.01.T36.RP2 Scale: NTS Drawn by: DEA Reviewed by: MAD Date: Feb 2019 Revision: 1	**Project Name** North Kent Wind Power Project - IEC 61400-11 Edition 3.0 - Turbine T36 **Figure Title** Plot of narrow band spectra - Turbine ON vs. Background at 8.0 m/s

Figure D.02



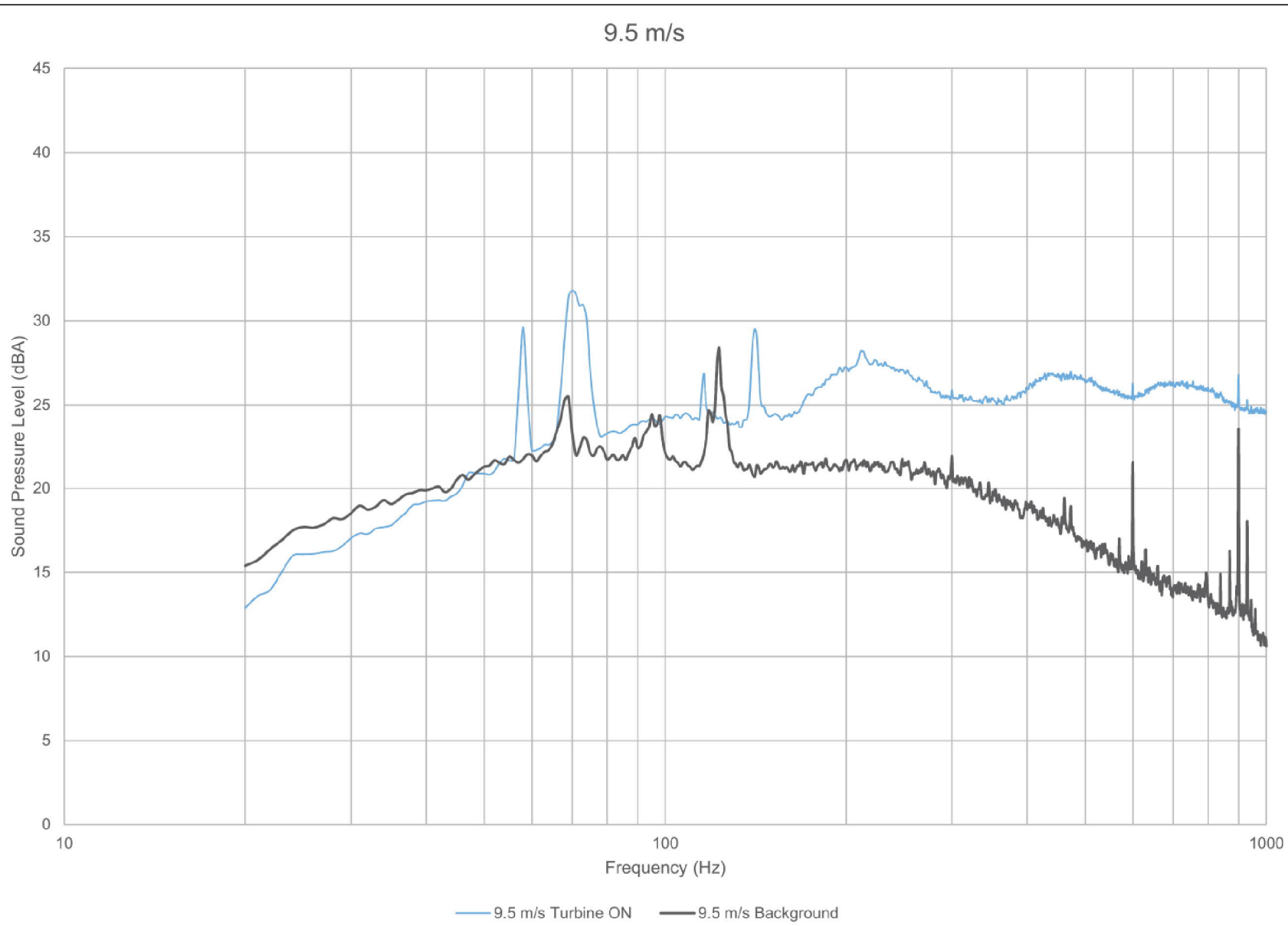
aercoustics	17283.01.T36.RP2 Scale: NTS Drawn by: DEA Reviewed by: MAD Date: Feb 2019 Revision: 1	**Project Name** North Kent Wind Power Project - IEC 61400-11 Edition 3.0 - Turbine T36 **Figure Title** Plot of narrow band spectra - Turbine ON vs. Background at 8.5 m/s

Figure D.03



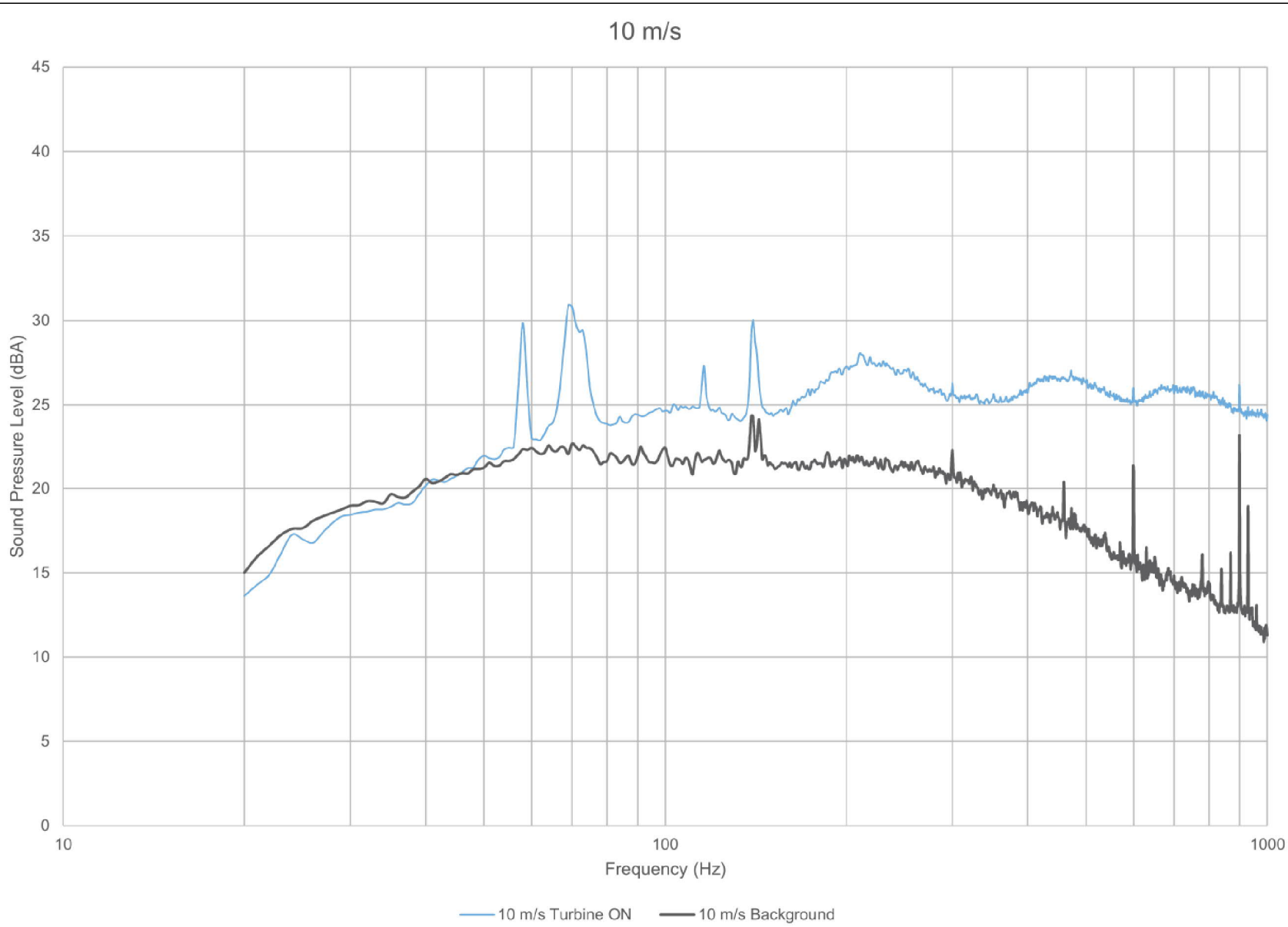
aercoustics	17283.01.T36.RP2 Scale: NTS Drawn by: DEA Reviewed by: MAD Date: Feb 2019 Revision: 1	**Project Name** North Kent Wind Power Project - IEC 61400-11 Edition 3.0 - Turbine T36 **Figure Title** Plot of narrow band spectra - Turbine ON vs. Background at 9.0 m/s

Figure D.04



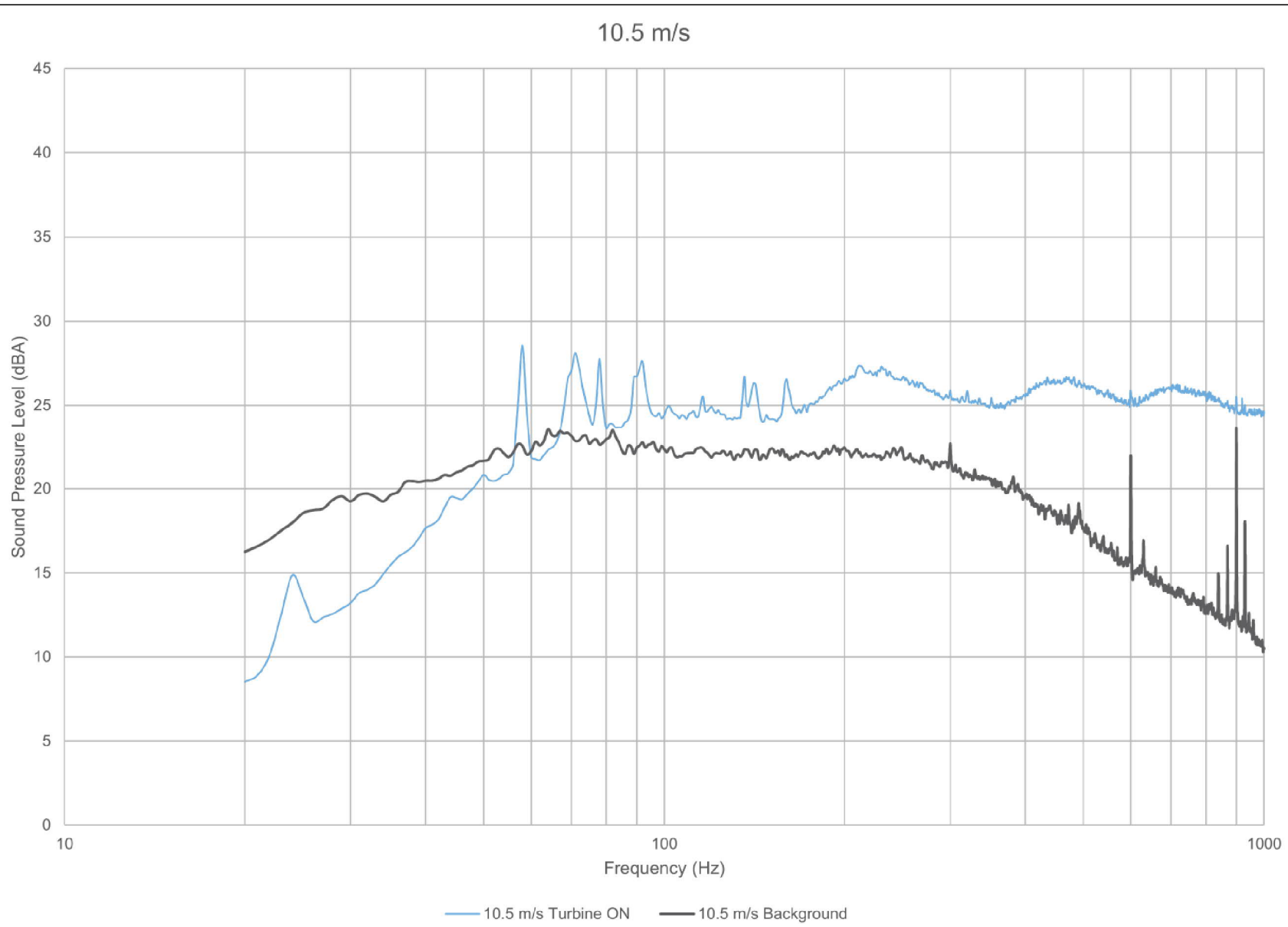
aercoustics	17283.01.T36.RP2 Scale: NTS Drawn by: DEA Reviewed by: MAD Date: Feb 2019 Revision: 1	**Project Name** North Kent Wind Power Project - IEC 61400-11 Edition 3.0 - Turbine T36 **Figure Title** Plot of narrow band spectra - Turbine ON vs. Background at 9.5 m/s

Figure D.05



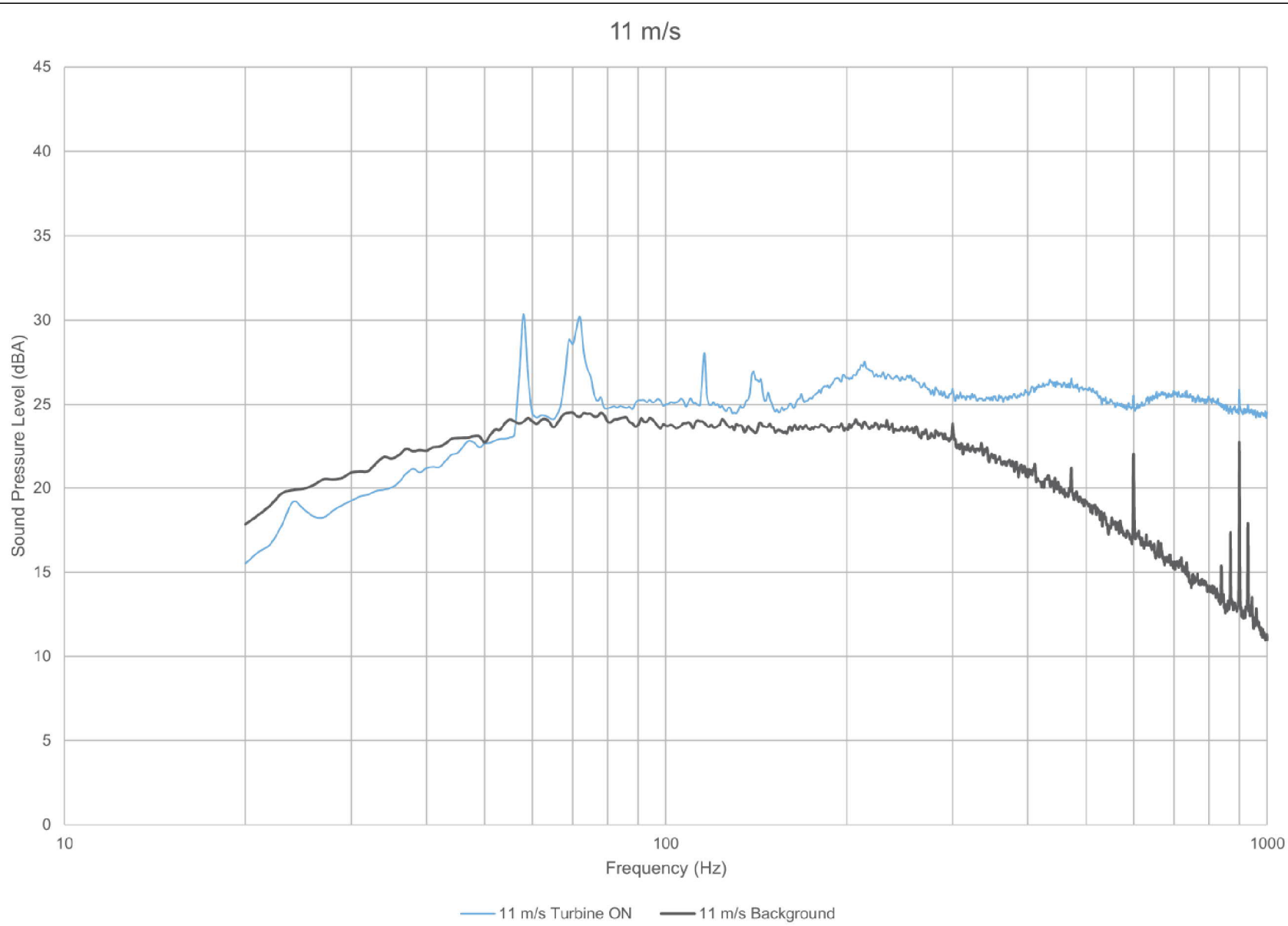
aercoustics	17283.01.T36.RP2 Scale: NTS Drawn by: DEA Reviewed by: MAD Date: Feb 2019 Revision: 1	**Project Name** North Kent Wind Power Project - IEC 61400-11 Edition 3.0 - Turbine T36 **Figure Title** Plot of narrow band spectra - Turbine ON vs. Background at 10.0 m/s

Figure D.06



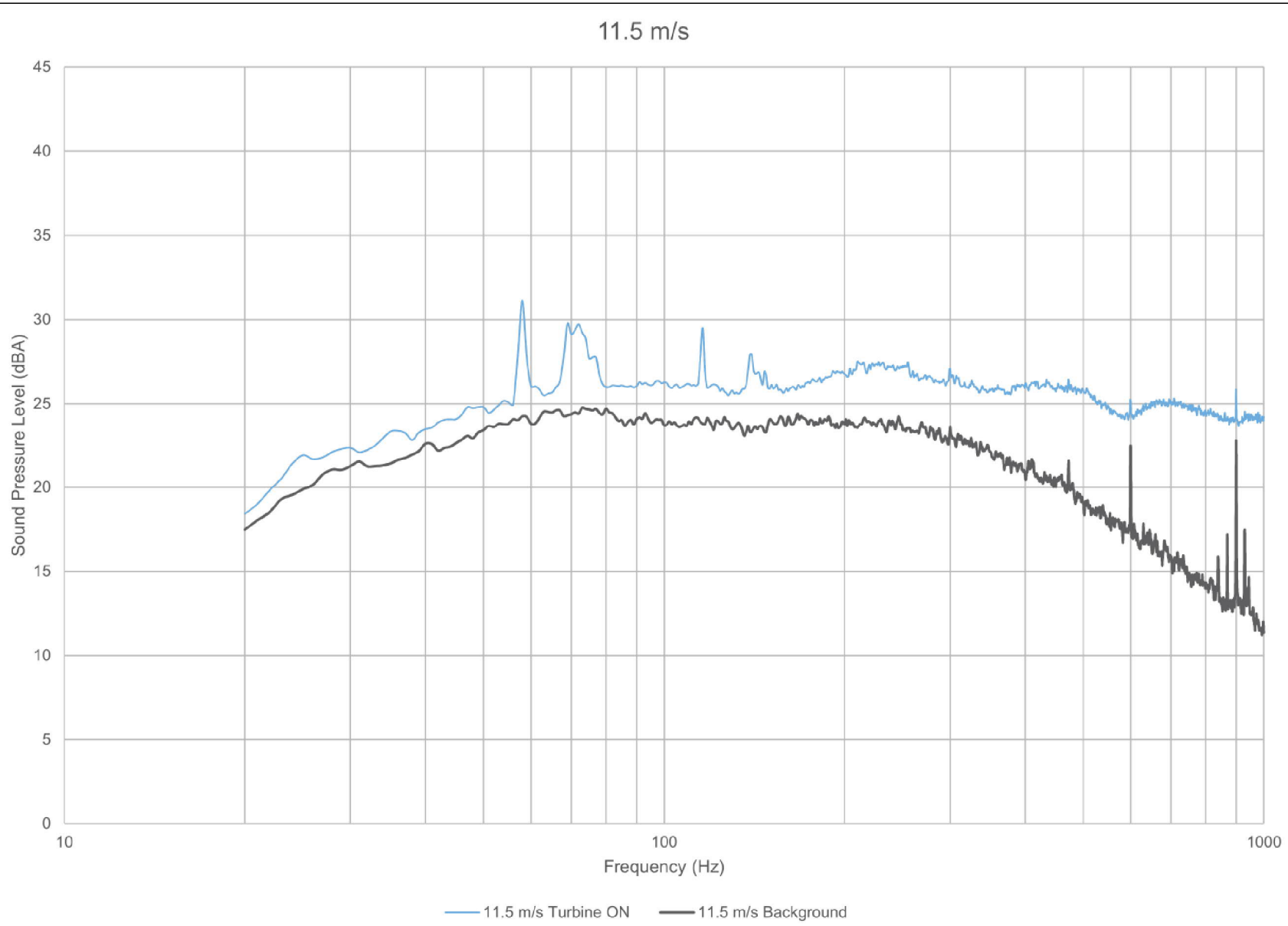
aercoustics	17283.01.T36.RP2 Scale: NTS Drawn by: DEA Reviewed by: MAD Date: Feb 2019 Revision: 1	**Project Name** North Kent Wind Power Project - IEC 61400-11 Edition 3.0 - Turbine T36 **Figure Title** Plot of narrow band spectra - Turbine ON vs. Background at 10.5 m/s

Figure D.07



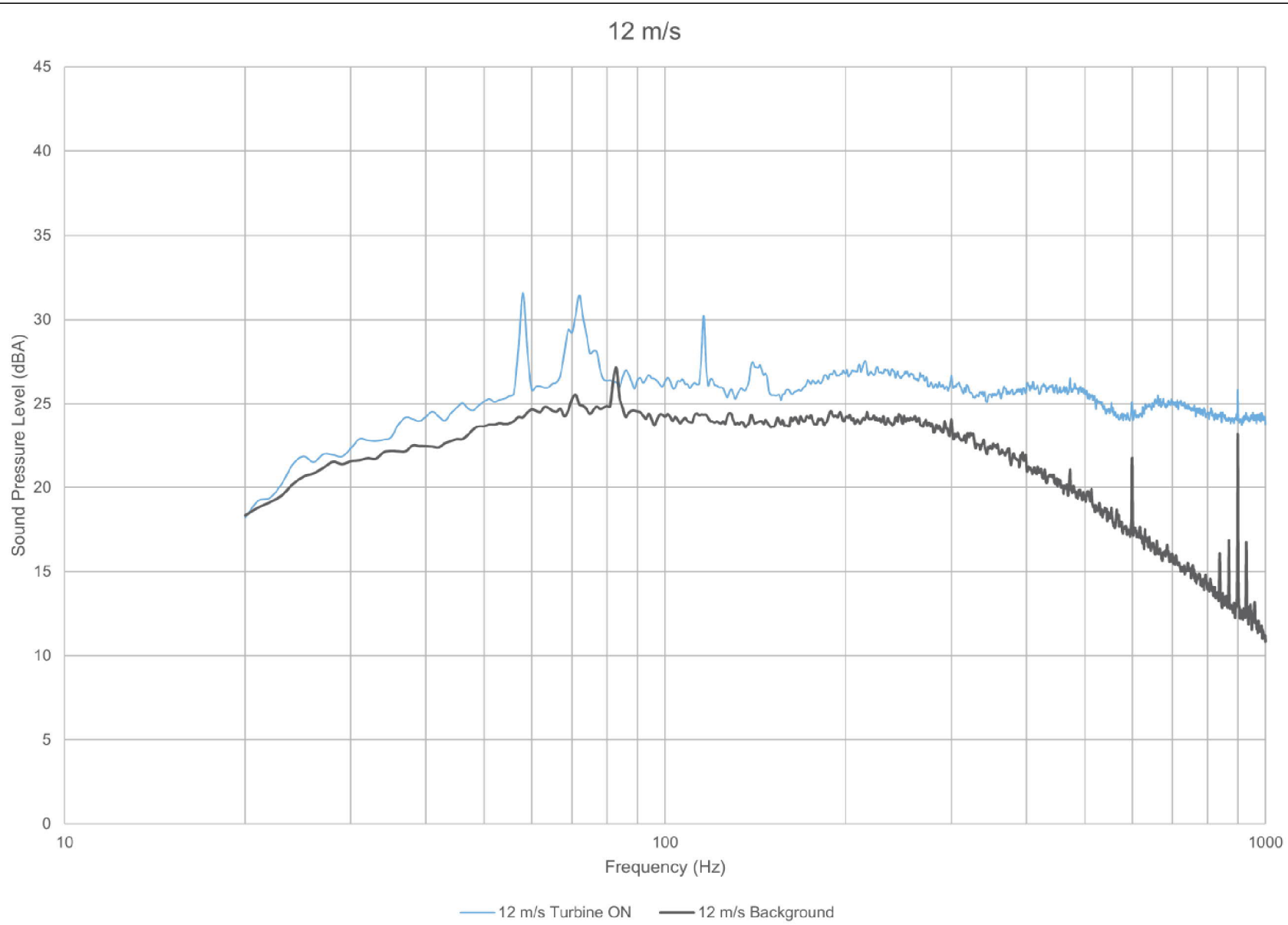
aercoustics	17283.01.T36.RP2 Scale: NTS Drawn by: DEA Reviewed by: MAD Date: Feb 2019 Revision: 1	**Project Name** North Kent Wind Power Project - IEC 61400-11 Edition 3.0 - Turbine T36 **Figure Title** Plot of narrow band spectra - Turbine ON vs. Background at 11.0 m/s

Figure D.08



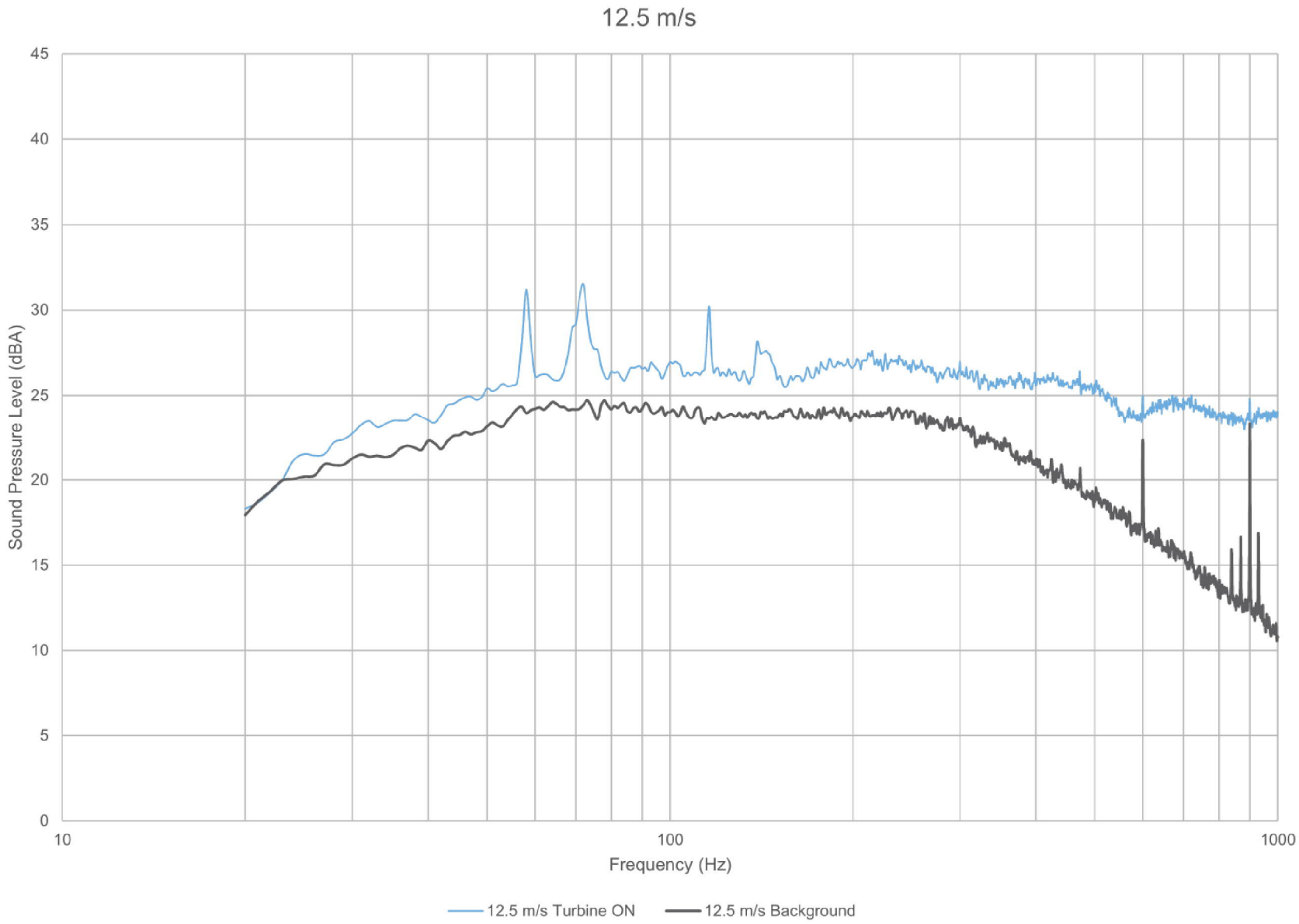
aercoustics	17283.01.T36.RP2 Scale: NTS Drawn by: DEA Reviewed by: MAD Date: Feb 2019 Revision: 1	**Project Name** North Kent Wind Power Project - IEC 61400-11 Edition 3.0 - Turbine T36 **Figure Title** Plot of narrow band spectra - Turbine ON vs. Background at 11.5 m/s

Figure D.09



aercoustics	17283.01.T36.RP2 Scale: NTS Drawn by: DEA Reviewed by: MAD Date: Feb 2019 Revision: 1	**Project Name** North Kent Wind Power Project - IEC 61400-11 Edition 3.0 - Turbine T36 **Figure Title** Plot of narrow band spectra - Turbine ON vs. Background at 12.0 m/s

Figure D.10



aercoustics	17283.01.T36.RP2 Scale: NTS Drawn by: DEA Reviewed by: MAD Date: Feb 2019 Revision: 1	**Project Name** North Kent Wind Power Project - IEC 61400-11 Edition 3.0 - Turbine T36 **Figure Title** Plot of narrow band spectra - Turbine ON vs. Background at 12.5 m/s

Figure D.11

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Appendix E
Measurement Data

Table E.01 Measurement data - Turbine ON

Project: North Kent Wind Farm - Turbine T36 - IEC 61400-11 Measurement

Report ID:17283.01.T36.RP2

Created on: 2/22/2019

***Blank data denotes values that were omitted in the analysis due to an extraneous event during recording

Data Point #	Standardized Wind Speed	LAeq	Turbine Power Output (kW)	Reference Yaw Angle (°)	Yaw Angle (°)	Pitch Angle (°)	Rotor RPM	Nacelle Anemometer Wind Speed (m/s)	10m Anemometer Wind Speed (m/s)	Air Temperature (-C)	Pressure (kPa)	Relative Humidity (%)
1	10.7	52.5	2817	300.5	293.2	4.3	13.2	11.0	8.0	-1.0	95572.4	66
2	10.3	52.2	2823	300.5	293.2	5.0	13.3	10.7	7.8	-1.0	97522.1	65
3	10.9	51.9	2739	300.5	293.2	3.6	12.9	11.3	7.7	-1.0	97763.6	65
4	10.7	52.6	2656	300.5	292.3	1.6	12.8	11.0	7.6	-1.0	98024.9	65
5	11.0	53.1	2834	300.5	290.9	3.2	13.4	11.4	8.1	-1.0	96441.8	65
6	11.2	52.8	2938	300.5	290.9	6.4	13.8	11.6	6.6	-1.0	97689.8	65
7	11.0	52.7	2858	300.5	290.9	7.0	13.4	11.3	6.2	-1.0	98478.6	65
8	10.8	51.5	2773	300.5	290.9	6.3	13.1	11.1	7.3	-1.0	98653.7	66
9			2738	300.5	290.9	5.2	12.9	10.4	7.8	-1.0	97960.1	66
10	11.1	51.8	2739	300.5	290.8	4.2	12.9	11.5	7.8	-1.0	97557.2	66
11	10.9	52.1	2808	300.5	288.7	5.3	13.2	11.3	9.6	-1.0	97513.7	66
12	10.7	51.8	2778	300.5	288.6	5.1	13.1	11.0	10.1	-1.0	98309.0	66
13	10.8	52.4	2733	300.5	288.6	3.4	12.9	11.2	8.6	-1.0	97802.7	66
14	11.0	51.7	2785	300.5	288.6	4.0	13.1	11.3	8.1	-0.9	98348.4	65
15	10.3	51.9	2758	300.5	288.6	3.1	13.0	10.6	8.3	-0.9	98190.5	65
16	10.5	52.1	2774	300.5	288.6	3.0	13.1	10.9	9.4	-0.9	98579.8	65
17			2824	300.5	288.6	3.9	13.3	10.5	9.2	-0.9	97928.8	65
18			2721	300.5	288.6	3.1	13.0	10.1	9.1	-0.9	99133.5	65
19	11.0	52.4	2747	300.5	288.6	2.4	13.0	11.4	8.9	-0.9	98735.1	65
20	11.0	52.6	2804	300.5	288.6	3.0	13.2	11.3	8.1	-0.9	98270.6	65
21			2794	300.5	288.6	3.4	13.2	9.9	9.2	-1.0	98710.5	65
22	11.3	52.5	2794	300.5	288.5	3.4	13.2	11.7	9.0	-1.0	98360.8	65
23	11.1	52.5	2782	300.5	287.4	3.5	13.1	11.4	8.7	-1.0	98372.0	65
24	10.3	52.2	2742	300.5	286.3	2.3	12.9	10.6	8.5	-1.0	98386.2	65
25	12.2	52.7	2821	300.5	286.3	3.4	13.3	12.6	7.6	-1.0	98911.8	65
26	10.9	52.4	2872	300.5	286.3	5.4	13.6	11.3	7.1	-1.0	97395.5	65
27	11.0	51.7	2819	300.5	286.3	5.8	13.3	11.4	6.7	-1.0	98206.4	64
28	11.1	52.4	2734	300.5	286.3	4.4	12.9	11.5	7.5	-1.0	98267.3	64
29	11.3	52.2	2748	300.5	286.3	3.8	13.0	11.7	7.5	-1.0	98022.6	64
30	10.7	52.0	2758	300.5	286.3	3.6	13.0	11.0	8.4	-1.0	98092.5	64
31	11.9	52.1	2811	300.5	286.3	4.6	13.3	12.3	8.0	-1.0	98208.7	64
32	10.5	51.9	2763	300.5	286.3	3.9	13.0	10.8	6.9	-1.0	97976.5	65
33	12.2	51.7	2700	300.5	286.3	3.0	12.9	12.6	7.0	-1.0	98695.8	65
34	10.1	52.1	2547	300.5	286.3	1.6	12.9	11.0	8.3	-1.0	99155.1	65
35	9.4	52.3	2250	300.5	286.4	0.7	13.0	9.8	8.3	-1.0	98472.7	65
36	9.4	52.7	2221	300.5	286.3	0.1	13.0	9.1	8.6	-1.0	98524.0	65
37	9.7	52.9	2363	300.5	286.3	0.0	13.1	10.6	8.4	-1.0	99147.0	65
38	9.7	52.5	2371	300.5	286.2	-0.6	13.1	9.1	7.1	-1.0	99144.1	65
39	9.2	52.7	2134	300.5	286.2	-1.0	13.0	10.3	6.9	-1.0	98322.9	65
40	9.5	53.0	2287	300.5	286.3	-0.6	13.1	10.0	6.8	-1.0	97473.0	65
41	10.6	53.3	2617	300.5	286.3	-0.7	13.1	10.9	7.3	-1.0	97725.7	65
42	10.6	53.2	2759	300.5	286.3	-0.6	13.1	10.9	7.7	-1.0	97667.3	65
43	10.8	53.4	2751	300.5	286.3	-0.5	13.1	11.2	7.9	-1.0	96902.8	65
44			2663	300.5	286.3	-0.7	13.0	10.0	8.1	-1.0	97713.0	65
45	10.3	53.2	2774	300.5	286.3	0.1	13.1	10.6	7.2	-1.0	97379.7	65
46	10.2	53.2	2569	300.5	286.4	-0.4	13.0	10.5	8.5	-1.0	98406.6	65
47	10.3	53.2	2821	300.5	286.4	1.5	13.4	10.6	8.5	-1.0	99121.2	65
48	12.1	52.8	2880	300.5	286.4	3.8	13.6	12.5	7.8	-1.0	99149.0	65
49	12.1	53.4	2835	300.5	287.9	4.8	13.4	12.5	7.9	-0.9	99156.1	65
50	11.0	51.9	2799	300.5	288.8	4.9	13.3	11.3	9.1	-0.9	99158.1	65
51	11.4	52.0	2759	300.5	288.8	4.5	13.0	11.8	8.1	-0.9	99158.0	65
52	11.1	51.8	2697	300.5	288.8	2.4	12.8	11.5	8.2	-0.9	99156.5	65
53	10.8	52.4	2771	300.5	288.8	2.8	13.1	11.2	8.8	-0.9	99153.5	65
54	11.3	52.8	2862	300.5	288.8	5.1	13.6	11.7	9.2	-0.9	99150.3	65
55	11.4	51.9	2816	300.5	288.8	5.6	13.3	11.8	7.9	-0.9	99147.4	65
56	12.1	52.1	2796	300.5	288.8	5.9	13.3	12.0	7.9	-1.0	99144.1	65
57	12.4	52.0	2774	300.5	288.8	5.8	13.2	12.9	8.7	-1.0	99141.1	65
58	11.6	51.8	2787	300.5	288.8	6.3	13.2	12.0	7.5	-1.0	99140.1	65
59	11.2	51.4	2759	300.5	288.8	6.0	13.1	11.6	8.7	-1.0	99139.5	65
60	11.0	51.9	2736	300.5	288.7	5.2	13.0	11.4	8.8	-1.0	99136.0	65
61	11.6	51.7	2743	300.5	288.7	4.9	13.0	12.0	8.8	-1.0	98235.3	65
62			2716	300.5	288.7	3.8	12.9	10.6	9.3	-1.0	98108.5	65
63	10.7	52.2	2702	300.5	288.8	2.0	12.8	11.1	9.2	-1.0	99066.1	65
64	10.2	52.5	2561	300.5	288.8	1.2	12.9	10.6	8.4	-1.0	98354.1	65
65	10.2	52.7	2571	300.5	288.8	0.9	13.0	11.7	9.0	-1.0	98237.2	65
66	9.8	52.5	2418	300.5	288.8	0.0	13.0	10.9	9.4	-1.0	99135.3	65
67	9.1	52.8	2089	300.5	288.8	-1.1	13.0	10.1	8.6	-1.0	99151.3	65
68	9.1	53.1	2121	300.5	288.7	-0.8	13.2	9.7	8.7	-1.0	99151.1	65
69	9.7	52.7	2369	300.5	288.7	0.2	13.1	10.8	9.2	-1.0	99150.1	65
70	10.1	53.0	2546	300.5	288.7	0.1	13.1	9.8	9.6	-1.0	99146.7	65
71	9.8	52.8	2444	300.5	288.7	-0.7	13.0	9.9	10.0	-1.0	99131.1	65
72			2608	300.5	288.7	-0.5	13.1	9.1	8.6	-1.0	99061.4	65
73	10.8	53.2	2808	300.5	286.5	0.7	13.3	11.2	8.1	-1.0	98974.9	65
74	10.5	53.1	2742	300.5	286.3	0.3	13.1	10.8	8.0	-1.0	98882.0	65
75	9.9	53.2	2497	300.5	286.3	-0.9	12.9	11.0	7.2	-5.2	93383.0	57
76			2688	300.5	286.3	-0.4	13.1	10.3	6.3	-1.0	99165.7	65
77			2830	300.5	286.2	1.3	13.4	10.4	7.9	-1.0	99165.8	65
78	10.6	53.1	2839	300.5	286.2	2.3	13.4	11.0	7.8	-1.0	99165.7	65
79	10.3	52.2	2806	300.5	286.2	3.1	13.3	10.7	7.1	-1.0	99167.0	65
80			2611	300.5	286.3	1.2	12.9	10.2	8.2	-1.0	99165.7	65
81	10.4	52.9	2803	300.5	286.2	3.4	13.4	10.8	7.3	-1.0	99165.4	65
82	11.2	52.5	2793	300.5	286.2	4.1	13.3	11.6	7.8	-1.0	99165.1	65
83	10.5	52.0	2741	300.5	286.3	3.5	13.1	10.9	8.8	-1.0	99165.0	65
84	10.5	52.9	2784	300.5	286.3	4.1	13.3	10.8	8.3	-1.0	99168.8	65
85	11.3	52.2	2790	300.5	286.3	5.0	13.3	11.7	7.0	-1.0	99179.3	64
86	10.5	51.7	2711	300.5	286.3	3.6	12.9	10.9	7.5	-1.0	99178.6	64
87	10.8	52.1	2700	300.5	286.3	2.3	12.9	11.1	8.3	-1.0	99177.4	64
88			2728	300.5	286.3	1.8	13.0	10.4	8.8	-1.0	99173.8	64

***Blank data denotes values that were omitted in the analysis due to an extraneous event during recording

Data Point #	Standardized Wind Speed	LAeq	Turbine Power Output (kW)	Reference Yaw Angle (°)	Yaw Angle (°)	Pitch Angle (°)	Rotor RPM	Nacelle Anemometer Wind Speed (m/s)	10m Anemometer Wind Speed (m/s)	Air Temperature (-C)	Pressure (kPa)	Relative Humidity (%)
89	10.3	52.6	2748	300.5	286.3	1.8	13.1	10.6	8.8	-1.0	99148.8	64
90	10.7	52.9	2634	300.5	286.4	0.6	12.9	11.1	9.4	-0.9	99167.9	64
91	10.3	52.8	2655	300.5	288.7	0.3	13.0	10.6	8.2	-0.9	99176.9	64
92			2606	300.5	288.8	-0.4	13.0	9.9	9.0	-0.9	99178.0	64
93	10.6	52.9	2740	300.5	288.8	-0.2	13.1	10.9	8.8	-0.9	99178.7	64
94	10.5	53.1	2769	300.5	288.8	0.1	13.2	10.9	8.5	-0.9	99179.0	64
95	11.2	53.1	2772	300.5	288.9	0.2	13.2	11.6	8.4	-0.9	99179.2	64
96	10.4	53.0	2777	300.5	288.9	0.7	13.2	10.7	8.4	-0.9	99179.6	64
97	9.8	52.7	2428	300.5	288.8	-0.8	12.9	10.3	8.0	-0.9	99179.9	65
98	9.9	52.9	2490	300.5	288.8	-0.6	13.1	9.7	9.5	-0.9	99179.7	65
99			2580	300.5	290.2	-0.8	13.1	10.2	10.1	-0.9	99179.8	65
100			2616	300.5	291.3	-0.9	13.0	9.9	9.1	-0.9	99180.2	65
101			2665	300.5	291.4	-0.9	13.0	9.5	8.3	-0.9	99179.7	65
102			2633	300.5	291.4	-0.9	13.0	9.9	8.1	-0.9	99181.7	65
103	10.6	53.9	2654	300.5	291.4	-0.9	13.0	11.0	8.7	-0.9	99192.0	65
104	11.0	53.6	2612	300.5	291.4	-0.8	13.0	11.4	8.8	-0.9	99192.0	65
105	11.8	53.8	2734	300.5	291.4	-0.7	13.1	12.2	8.5	-0.9	99191.5	65
106	9.9	53.8	2503	300.5	293.0	-0.9	12.9	11.2	8.6	-0.9	99191.0	65
107	10.7	53.9	2628	300.5	293.9	-0.3	13.1	11.0	9.0	-0.9	99190.6	65
108	10.3	54.3	2757	300.5	294.0	-0.1	13.2	10.6	8.9	-0.9	99189.2	64
109	10.7	53.9	2815	300.5	294.0	1.5	13.4	11.1	7.2	-0.9	99185.6	64
110			2797	300.5	294.0	2.1	13.3	10.4	7.5	-0.9	99168.9	64
111	10.3	52.9	2782	300.5	294.0	2.4	13.2	10.7	7.4	-0.9	99183.2	64
112			2677	300.5	294.0	1.4	13.0	10.1	8.7	-0.9	99191.3	64
113	9.9	53.2	2486	300.5	294.0	0.3	13.0	9.8	7.8	-0.9	99192.7	64
114	9.7	53.2	2394	300.5	294.0	-0.4	13.0	9.5	7.6	-0.9	99193.3	64
115	9.6	53.7	2325	300.5	292.5	-0.8	13.0	9.0	8.0	-0.9	99193.6	64
116			2715	300.5	291.1	0.5	13.3	10.3	8.4	-0.9	99193.9	64
117	11.6	53.3	2885	300.5	291.1	3.5	13.7	12.0	8.3	-0.9	99193.6	64
118	11.1	52.7	2861	300.5	291.2	5.1	13.6	11.5	8.0	-0.9	99193.8	64
119	11.2	51.7	2741	300.5	291.2	3.9	13.0	11.6	7.3	-0.9	99194.0	64
120			2702	300.5	291.2	2.3	12.9	10.3	8.5	-0.9	99193.9	64
121	10.9	52.8	2730	300.5	291.2	1.3	13.0	11.2	9.2	-0.9	99194.3	65
122	10.4	52.9	2781	300.5	291.2	1.9	13.2	10.7	8.6	-0.9	99194.1	65
123	10.7	52.6	2803	300.5	291.2	3.0	13.3	11.1	8.6	-0.9	99194.1	65
124	11.0	52.9	2776	300.5	291.2	2.9	13.2	11.3	7.5	-0.9	99194.0	65
125	11.6	52.4	2834	300.5	291.2	4.7	13.5	12.0	7.1	-0.9	99194.2	65
126	10.9	52.4	2773	300.5	291.2	4.6	13.2	11.2	8.4	-0.9	99194.6	65
127	10.8	52.0	2726	300.5	291.2	3.5	13.0	11.2	8.6	-0.9	99194.9	65
128	11.2	52.3	2731	300.5	291.2	2.7	13.0	11.6	8.6	-0.9	99194.5	65
129			2751	300.5	291.2	2.8	13.0	10.4	8.2	-0.9	99194.4	65
130			2748	300.5	291.2	2.0	13.0	10.3	10.0	-0.9	99194.6	65
131	10.8	52.4	2760	300.5	291.2	2.4	13.1	11.2	10.3	-0.9	99194.8	65
132			2745	300.5	291.2	1.6	13.0	10.5	9.6	-0.9	99194.7	64
133	9.9	52.7	2506	300.5	291.2	0.3	12.9	10.0	9.6	-0.9	99194.3	64
134	10.2	53.1	2569	300.5	291.2	0.1	13.1	9.8	9.3	-0.9	99194.3	64
135			2782	300.5	291.2	0.8	13.2	10.1	8.8	-0.9	99194.2	64
136			2765	300.5	291.2	0.6	13.1	10.0	8.9	-0.9	99194.3	64
137			2663	300.5	291.2	-0.4	13.0	10.5	8.4	-0.9	99194.3	64
138			2670	300.5	291.2	-0.8	13.0	10.2	8.9	-0.9	99194.6	64
139			2608	300.5	291.2	-0.9	13.0	10.5	8.6	-0.9	99194.0	64
140	10.2	53.0	2573	300.5	291.2	-0.7	13.0	11.3	7.6	-0.9	99193.9	64
141			2629	300.5	291.2	-0.8	13.0	10.3	7.5	-0.9	99193.3	64
142	9.7	53.0	2393	300.5	291.2	-0.9	13.0	9.5	7.5	-0.9	99193.6	64
143	9.7	52.7	2364	300.5	291.1	-0.8	13.0	9.5	8.3	-0.9	99193.5	64
144	9.6	53.1	2342	300.5	291.1	-0.7	13.1	10.8	7.9	-1.0	99193.4	65
145	9.3	52.9	2175	300.5	291.1	-1.1	13.1	10.9	7.4	-1.0	99193.2	65
146	9.6	52.9	2329	300.5	291.1	-0.3	13.2	9.6	8.2	-1.0	99192.7	65
147			2610	300.5	291.1	0.4	13.1	10.0	7.2	-1.0	99191.7	65
148	9.9	52.8	2461	300.5	291.1	-0.5	13.0	9.6	7.4	-1.0	99188.7	65
149	10.0	53.1	2508	300.5	291.2	-0.7	13.1	10.3	7.4	-1.0	99112.7	65
150	9.9	53.2	2467	300.5	291.2	-0.9	13.0	10.2	7.9	-0.9	99166.6	65
151	9.6	53.1	2324	300.5	291.2	-0.9	13.0	9.7	7.8	-0.9	99179.4	65
152	9.6	53.0	2325	300.5	291.2	-0.8	13.1	9.9	7.5	-0.9	99180.8	65
153	9.5	52.7	2300	300.5	291.2	-0.9	13.1	10.4	6.6	-0.9	99181.6	65
154	9.5	52.7	2295	300.5	291.2	-0.9	13.1	8.8	7.8	-0.9	99182.1	65
155	9.4	52.8	2238	300.5	291.2	-0.9	13.0	11.2	7.9	-0.9	99182.0	65
156	8.7	52.3	1899	300.5	291.2	-1.2	13.0	10.1	8.6	-0.9	99182.0	64
157	8.8	52.8	1909	300.5	291.2	-1.2	13.1	9.2	7.8	-0.9	99182.0	64
158	9.0	53.2	2065	300.5	291.2	-1.1	13.2	10.4	8.0	-0.9	99182.0	64
159	9.0	53.1	2054	300.5	291.2	-1.1	13.1	10.3	7.0	-0.9	99182.0	64
160	8.3	52.6	1631	300.5	293.0	-1.4	12.9	8.6	8.7	-0.9	99181.8	64
161	7.9	52.2	1443	300.5	293.7	-1.8	12.8	7.7	8.1	-0.9	99182.1	64
162	8.2	52.9	1612	300.5	292.7	-1.5	13.1	8.2	8.2	-0.9	99182.4	64
163	8.3	52.9	1658	300.5	290.6	-1.5	13.2	8.5	8.3	-0.9	99182.1	64
164	8.8	53.2	1953	300.5	290.6	-1.2	13.2	8.2	8.1	-0.9	99182.4	64
165	9.0	53.8	2059	300.5	289.5	-1.1	13.2	8.2	7.0	-0.9	99182.6	64
166	8.3	53.2	1655	300.5	288.0	-1.4	13.0	9.3	6.5	-0.9	99182.2	64
167	8.4	52.6	1714	300.5	287.9	-1.4	13.1	8.8	7.8	-0.9	99183.8	65
168	8.4	52.6	1699	300.5	287.9	-1.4	13.1	8.4	8.1	-0.9	99182.3	65
169	8.5	52.9	1760	300.5	288.0	-1.3	13.1	9.1	7.4	-0.9	99182.4	65
170	8.6	52.7	1844	300.5	288.0	-1.2	13.1	9.2	7.1	-0.9	99182.2	65
171	8.3	52.7	1662	300.5	288.0	-1.6	13.1	8.8	7.3	-0.9	99182.6	65
172	8.5	52.8	1739	300.5	288.0	-1.6	13.1	8.5	6.3	-0.9	99182.7	65
173	8.7	53.2	1864	300.5	288.0	-1.5	13.2	9.1	6.2	-0.9	99193.2	65
174	8.8	53.0	1910	300.5	288.0	-1.5	13.1	8.6	6.8	-0.9	99195.3	66
175	8.2	52.7	1589	300.5	288.0	-1.8	13.0	8.6	6.2	-0.9	99195.1	66
176	8.2	53.0	1576	300.5	288.0	-1.8	13.1	8.8	6.3	-0.9	99195.3	66

Table E.01 Measurement data - Turbine ON

Project: North Kent Wind Farm - Turbine T36 - IEC 61400-11 Measurement

Report ID:17283.01.T36.RP2

Created on: 2/22/2019

***Blank data denotes values that were omitted in the analysis due to an extraneous event during recording

Data Point #	Standardized Wind Speed	LAeq	Turbine Power Output (kW)	Reference Yaw Angle (°)	Yaw Angle (°)	Pitch Angle (°)	Rotor RPM	Nacelle Anemometer Wind Speed (m/s)	10m Anemometer Wind Speed (m/s)	Air Temperature (-C)	Pressure (kPa)	Relative Humidity (%)
177	7.9	52.0	1408	300.5	288.0	-1.9	12.7	8.0	7.7	-0.9	99195.4	66
178	8.4	52.6	1695	300.5	288.0	-0.6	13.0	9.0	8.7	-0.9	99195.4	66
179	10.2	52.5	2567	300.5	288.0	1.7	13.2	10.8	8.2	-0.9	99195.1	65
180	10.3	52.8	2604	300.5	288.4	1.3	13.1	10.6	7.1	-0.9	99195.6	65
181	9.5	52.7	2277	300.5	290.4	-0.2	13.0	9.2	7.0	-0.9	99195.6	65
182	8.8	53.4	1932	300.5	290.4	-0.8	13.0	9.4	7.0	-0.9	99195.5	65
183			2649	300.5	290.4	1.7	13.3	10.2	7.9	-0.9	99195.3	65
184	10.3	52.8	2828	300.5	290.4	3.2	13.4	10.6	7.8	-0.9	99195.5	65
185	10.4	52.2	2776	300.5	290.4	3.2	13.2	10.7	7.6	-0.8	99195.2	65
186	10.5	52.4	2764	300.5	290.4	2.9	13.1	10.9	7.3	-0.8	99195.3	65
187	11.1	52.8	2758	300.5	290.4	2.8	13.1	11.5	7.6	-0.8	99195.4	65
188	10.7	52.6	2759	300.5	290.4	2.5	13.1	11.1	8.2	-0.8	99195.6	65
189	10.9	52.4	2815	300.5	290.4	3.9	13.4	11.2	9.0	-0.8	99195.8	65
190	10.4	52.1	2792	300.5	290.4	4.3	13.3	10.8	7.8	-0.8	99195.6	65
191	10.6	51.9	2740	300.5	290.4	3.5	13.0	10.9	8.0	-0.8	99195.7	65
192			2706	300.5	290.4	2.0	12.9	10.1	8.7	-0.8	99195.8	64
193			2682	300.5	290.2	1.2	12.9	10.1	8.7	-0.8	99195.5	64
194			2688	300.5	287.9	0.8	13.0	10.1	7.8	-0.8	99195.7	64
195	11.4	52.9	2775	300.5	287.8	1.1	13.2	11.8	8.0	-0.8	99195.5	64
196			2796	300.5	287.8	2.0	13.3	10.5	8.0	-0.8	99195.8	64
197			2772	300.5	287.8	1.8	13.1	10.5	8.6	-0.9	99195.8	64
198	10.5	53.0	2790	300.5	287.8	2.3	13.2	10.9	9.3	-0.9	99195.9	64
199	10.4	52.4	2761	300.5	287.8	2.1	13.1	10.8	10.0	-0.9	99196.0	64
200	10.5	52.8	2744	300.5	287.8	1.4	13.0	10.8	8.9	-0.9	99195.7	64
201			2758	300.5	287.8	1.0	13.1	10.2	9.5	-0.9	99195.8	64
202			2795	300.5	287.8	1.8	13.3	10.5	9.5	-0.9	99189.4	64
203	10.7	52.6	2783	300.5	287.8	2.1	13.2	11.1	8.1	-0.9	99183.4	63
204			2697	300.5	287.8	0.8	13.0	10.0	7.9	-0.9	99183.6	63
205			2704	300.5	286.6	0.4	13.0	10.3	9.1	-0.9	99183.3	63
206			2753	300.5	285.2	0.3	13.1	10.5	8.9	-0.9	99183.3	63
207			2795	300.5	285.2	1.0	13.2	10.0	8.3	-0.9	99183.6	63
208			2805	300.5	285.2	2.0	13.3	11.2	7.8	-0.9	99183.4	63
209			2765	300.5	285.2	1.6	13.1	10.7	7.6	-0.9	99183.1	64
210			2649	300.5	285.2	0.4	13.0	11.2	7.4	-0.9	99183.5	64
211			2600	300.5	285.2	-0.1	13.0	10.8	7.5	-0.9	99183.5	64
212			2695	300.5	285.2	-0.3	13.1	11.4	8.1	-0.9	99183.7	64
213			2790	300.5	285.2	0.7	13.2	11.2	8.0	-0.9	99183.4	64
214			2731	300.5	285.2	-0.3	13.0	10.3	8.5	-0.9	99186.3	64
215			2757	300.5	285.2	-0.5	13.1	10.6	7.8	-0.9	99183.5	64
216			2672	300.5	285.2	-0.8	13.0	10.6	9.3	-0.9	99183.5	64
217			2510	300.5	285.2	-0.9	13.0	10.7	9.0	-0.9	99183.2	64
218			2448	300.5	285.2	-0.9	13.0	9.8	8.0	-0.9	99183.2	64
219			2105	300.5	285.2	-1.1	13.0	10.3	7.8	-0.9	99183.5	64
220			2267	300.5	285.2	-0.4	13.2	9.0	7.6	-0.9	99191.9	64
221			2348	300.5	285.2	-0.4	13.1	9.6	7.2	-0.9	99196.4	64
222			2263	300.5	285.2	-0.9	13.1	9.4	7.2	-0.9	99196.2	64
223			2269	300.5	285.2	-0.9	13.1	9.6	7.8	-0.9	99196.4	64
224			2079	300.5	285.2	-1.1	13.1	9.7	7.0	-0.9	99196.2	64
225			2049	300.5	285.2	-1.1	13.1	8.8	7.4	-0.9	99196.5	64
226			2056	300.5	285.2	-1.1	13.1	9.5	7.5	-0.9	99196.4	64
227			2197	300.5	285.2	-0.6	13.2	9.8	7.3	-0.9	99196.5	65
228			2364	300.5	285.2	-0.3	13.2	10.9	7.7	-0.9	99196.3	65
229			2363	300.5	285.2	-0.7	13.1	10.6	9.7	-0.9	99196.2	65
230			2334	300.5	285.2	-0.8	13.1	9.8	9.3	-0.9	99196.4	65
231			2266	300.5	285.2	-0.9	13.1	9.8	8.9	-0.9	99196.5	65
232			2635	300.5	285.2	-0.3	13.2	10.1	7.9	-0.9	99190.4	64
233			2786	300.5	285.2	0.1	13.2	11.3	8.1	-0.9	99183.5	64
234			2801	300.5	285.2	1.0	13.3	11.3	7.6	-0.9	99183.6	64
235			2793	300.5	285.2	1.5	13.2	11.0	7.7	-0.9	99183.8	64
236			2736	300.5	285.2	0.8	13.1	10.8	6.5	-0.9	99183.9	64
237			2577	300.5	285.2	-0.3	13.0	9.7	6.3	-0.9	99183.7	64
238			2502	300.5	285.2	-0.7	13.0	10.3	8.3	-0.9	99183.7	64
239			2723	300.5	285.2	-0.6	13.1	10.5	7.2	-0.9	99183.8	65
240			2771	300.5	285.2	-0.4	13.1	9.8	7.2	-0.9	99183.7	65
241			2760	300.5	285.2	-0.6	13.1	10.5	7.5	-0.9	99183.8	65
242			2546	300.5	285.2	-0.9	12.9	10.1	7.7	-0.9	99183.8	65
243			2347	300.5	285.2	-0.9	13.0	9.8	7.3	-0.9	99183.8	65
244			2174	300.5	285.2	-1.0	13.0	9.5	7.5	-0.9	99183.9	65
245			2244	300.5	285.2	-0.8	13.1	8.8	7.7	-0.9	99184.0	65
246			2446	300.5	285.2	-0.2	13.1	9.5	8.2	-0.9	99184.0	65
247			2639	300.5	285.1	-0.3	13.1	11.1	7.8	-0.9	99183.9	65
248			2323	300.5	285.1	-0.8	13.0	10.5	7.3	-0.9	99184.0	65
249			2631	300.5	285.1	-0.1	13.1	11.0	6.7	-0.9	99183.9	65
250			2709	300.5	285.2	-0.3	13.1	11.7	5.9	-0.9	99191.2	65
251			2292	300.5	285.2	-1.0	12.9	10.3	6.9	-0.9	99196.9	65
252			2208	300.5	285.2	-1.1	13.1	9.4	7.2	-0.9	99196.6	65
253			2315	300.5	285.2	-0.7	13.2	8.8	7.5	-0.9	99196.6	65
254	9.8	52.9	2447	300.5	286.7	-0.3	13.1	9.8	7.9	-0.9	99196.8	65
255	9.5	53.0	2267	300.5	287.6	-1.0	13.1	9.0	8.0	-0.9	99196.8	65
256	9.7	52.5	2369	300.5	298.1	1.1	13.2	9.2	5.8	-0.8	99225.6	66
257	9.8	52.8	2430	300.5	298.2	0.7	13.1	10.3	6.9	-0.8	99226.2	66
258	9.7	52.5	2389	300.5	298.2	0.0	13.0	10.6	6.3	-0.8	99226.6	67
259	9.5	52.6	2286	300.5	298.2	-0.7	13.1	10.0	6.0	-0.8	99226.6	67
260	9.5	52.5	2308	300.5	298.2	-0.9	13.1	10.4	6.1	-0.8	99226.6	67
261	9.4	52.7	2258	300.5	298.2	-0.7	13.1	10.5	7.9	-0.8	99226.6	67
262	9.6	52.6	2321	300.5	298.2	-0.8	13.1	9.4	8.9	-0.8	99226.4	67
263	9.0	52.6	2056	300.5	298.1	-0.9	13.1	9.7	8.3	-0.8	99226.4	65
264			2624	300.5	298.1	1.2	13.2	10.2	8.9	-0.8	99226.5	65

***Blank data denotes values that were omitted in the analysis due to an extraneous event during recording

Data Point #	Standardized Wind Speed	LAeq	Turbine Power Output (kW)	Reference Yaw Angle (°)	Yaw Angle (°)	Pitch Angle (°)	Rotor RPM	Nacelle Anemometer Wind Speed (m/s)	10m Anemometer Wind Speed (m/s)	Air Temperature (-C)	Pressure (kPa)	Relative Humidity (%)
265			2763	300.5	298.1	1.0	13.1	10.2	9.1	-0.8	99226.4	65
266			2588	300.5	298.1	-0.1	13.0	9.6	8.2	-0.8	99226.3	65
267			2607	300.5	298.1	-0.6	13.0	10.1	7.4	-0.8	99226.3	65
268			2587	300.5	298.1	-0.9	13.0	10.4	7.6	-0.8	99226.4	65
269			2626	300.5	298.2	-0.8	13.0	10.4	7.5	-0.8	99226.3	65
270	9.9	52.7	2475	300.5	298.2	-0.9	13.0	10.3	7.2	-0.8	99226.4	65
271	9.6	53.0	2331	300.5	298.2	-0.8	13.0	10.2	7.3	-0.8	99226.4	65
272	10.1	52.9	2555	300.5	298.2	-0.4	13.1	10.4	7.0	-0.8	99226.5	65
273	10.1	52.7	2544	300.5	298.2	-0.9	13.0	10.4	7.2	-0.8	99226.4	65
274	9.9	52.8	2460	300.5	298.2	-0.9	13.0	10.5	7.2	-0.8	99226.3	65
275	10.5	53.0	2586	300.5	298.2	-0.6	13.1	10.9	6.3	-0.8	99226.4	65
276	10.5	53.4	2799	300.5	298.2	0.1	13.2	10.8	6.0	-0.8	99226.4	66
277			2824	300.5	298.2	1.0	13.3	10.3	6.2	-0.8	99226.4	66
278			2729	300.5	298.2	-0.3	13.0	10.3	6.3	-0.8	99226.4	66
279			2667	300.5	298.2	-0.8	13.0	10.3	6.1	-0.8	99226.6	66
280	10.0	52.9	2526	300.5	298.2	-0.9	13.0	10.2	6.8	-0.8	99226.5	66
281	9.9	52.8	2476	300.5	298.2	-0.9	13.0	10.3	6.8	-0.8	99235.8	66
282	9.4	53.1	2240	300.5	297.1	-1.0	13.0	9.1	7.7	-0.8	99238.5	66
283	10.0	52.9	2508	300.5	295.7	-0.3	13.1	10.3	7.7	-0.8	99238.5	66
284			2618	300.5	295.7	-0.4	13.1	10.4	6.8	-0.8	99238.6	66
285	9.8	52.6	2444	300.5	295.7	-0.9	13.0	10.2	6.7	-0.8	99238.5	66
286	9.5	52.8	2314	300.5	295.7	-0.9	13.0	10.4	7.3	-0.8	99238.6	66
287	9.4	52.7	2246	300.5	295.7	-0.9	13.0	9.5	6.8	-0.8	99229.4	65
288	9.6	52.6	2344	300.5	295.7	-0.7	13.1	9.3	7.5	-0.8	99226.5	65
289	10.3	52.9	2627	300.5	295.7	-0.5	13.1	10.7	7.9	-0.8	99226.4	65
290	10.7	53.1	2650	300.5	295.7	-0.8	13.1	11.1	6.5	-0.8	99226.5	65
291	9.8	53.0	2444	300.5	295.7	-0.9	13.0	10.8	6.8	-0.8	99226.6	65
292	9.6	52.8	2316	300.5	295.7	-0.9	13.0	9.2	7.8	-0.8	99226.6	65
293	9.3	53.0	2186	300.5	295.7	-0.9	13.0	9.3	8.7	-0.8	99226.6	65
294	9.5	52.8	2273	300.5	295.7	-0.8	13.1	10.0	9.1	-0.8	99226.7	65
295	9.5	52.9	2292	300.5	295.7	-0.9	13.1	10.1	8.0	-0.8	99226.6	65
296	9.1	52.7	2113	300.5	295.7	-1.1	13.1	9.8	8.2	-0.8	99226.7	65
297	9.4	53.0	2234	300.5	295.7	-1.1	13.2	9.6	7.3	-0.8	99226.7	65
298	9.2	53.1	2158	300.5	295.7	-1.1	13.1	9.6	7.9	-0.8	99226.8	65
299	9.0	52.9	2072	300.5	295.7	-1.1	13.1	9.0	7.6	-0.8	99226.7	65
300	9.0	52.7	2029	300.5	295.7	-1.1	13.1	9.0	8.0	-0.8	99226.8	65
301	8.7	52.7	1898	300.5	295.7	-1.2	13.1	8.4	7.3	-0.8	99226.7	65
302	8.5	52.9	1752	300.5	295.7	-1.3	13.1	8.6	7.5	-0.8	99226.8	65
303	8.3	52.6	1679	300.5	295.7	-1.2	13.1	9.7	7.4	-0.8	99226.7	65
304	8.5	52.9	1771	300.5	295.7	-1.0	13.2	8.9	8.0	-0.8	99226.7	65
305	8.5	52.6	1768	300.5	295.7	-1.0	13.1	8.5	7.6	-0.8	99226.7	65
306	8.2	52.4	1610	300.5	295.7	-1.2	13.1	8.9	8.0	-0.8	99226.6	65
307	8.4	52.5	1700	300.5	295.7	-1.1	13.2	9.6	8.2	-0.8	99226.6	65
308	8.2	52.5	1600	300.5	295.7	-1.4	13.1	8.2	7.9	-0.8	99226.9	65
309	8.2	52.8	1582	300.5	295.7	-1.9	13.1	7.8	7.5	-0.8	99226.7	65
310	8.2	52.9	1623	300.5	295.7	-1.8	13.2	8.2	7.1	-0.9	99226.7	65
311	8.3	52.7	1673	300.5	295.7	-1.7	13.1	8.7	6.9	-0.9	99226.7	65
312	8.3	52.6	1646	300.5	295.7	-1.8	13.1	9.1	7.2	-0.9	99226.7	65
313	8.5	52.6	1761	300.5	295.7	-1.6	13.1	8.1	6.1	-0.9	99226.4	65
314	8.4	52.7	1701	300.5	295.7	-1.5	13.1	8.9	5.9	-0.9	99226.7	65
315	8.1	52.9	1564	300.5	295.7	-1.3	13.0	8.5	6.1	-0.9	99226.6	65
316	8.1	52.4	1515	300.5	295.7	-1.4	12.9	8.2	6.4	-0.8	99226.6	65
317	8.0	52.6	1476	300.5	295.0	-1.4	12.9	7.8	7.2	-0.8	99226.7	66
318	8.9	52.7	2000	300.5	293.2	0.2	13.3	9.0	7.3	-0.8	99226.6	66
319	9.3	52.8	2177	300.5	293.2	-0.5	13.2	8.5	6.8	-0.8	99226.5	66
320	9.1	53.3	2105	300.5	293.2	-0.9	13.1	8.8	6.3	-0.8	99226.6	66
321	8.8	52.7	1913	300.5	293.2	-1.2	13.1	7.9	6.5	-0.8	99226.6	66
322	8.5	52.5	1765	300.5	293.2	-1.3	13.1	8.3	6.1	-0.8	99226.7	66
323	8.8	52.9	1935	300.5	293.2	-0.9	13.2	8.7	6.4	-0.8	99226.6	66
324	9.3	52.9	2187	300.5	293.2	-1.0	13.2	9.4	7.1	-0.8	99226.6	66
325	9.2	53.1	2157	300.5	293.2	-1.1	13.1	10.0	8.1	-0.8	99226.4	66
326	9.1	52.7	2116	300.5	293.2	-1.1	13.1	9.9	8.2	-0.8	99226.4	66
327	9.0	52.9	2072	300.5	293.2	-1.1	13.1	9.1	7.4	-0.8	99226.4	66
328	8.8	53.1	1963	300.5	293.2	-1.2	13.1	9.5	6.9	-0.8	99226.4	65
329	8.8	53.3	1939	300.5	293.2	-1.2	13.1	9.7	6.8	-0.8	99226.5	65
330	8.5	52.8	1771	300.5	293.2	-1.3	13.0	9.4	8.1	-0.8	99226.7	65
331	8.2	53.0	1615	300.5	293.2	-1.5	13.1	8.1	8.2	-0.8	99226.7	65
332	8.5	53.0	1787	300.5	293.2	-1.4	13.2	9.0	7.3	-0.8	99226.8	65
333	8.5	52.6	1775	300.5	293.2	-1.6	13.1	8.8	7.2	-0.8	99226.7	65
334	8.5	52.8	1776	300.5	293.2	-1.6	13.1	9.1	7.7	-0.8	99226.7	65
335	8.8	52.8	1935	300.5	293.2	-1.5	13.2	9.1	8.3	-0.8	99226.6	65
336	8.6	52.7	1827	300.5	293.2	-1.6	13.1	8.4	7.2	-0.8	99226.7	65
337	8.9	52.9	2011	300.5	293.2	-1.4	13.2	9.0	6.9	-0.8	99226.6	65
338	8.5	52.3	1738	300.5	293.2	-1.3	13.0	8.3	7.1	-0.8	99226.6	65
339	8.3	52.6	1666	300.5	293.2	-1.4	13.1	7.3	7.0	-0.8	99227.1	65
340	8.1	52.7	1543	300.5	292.8	-1.6	13.0	8.3	7.3	-0.9	99226.8	65
341	7.9	51.6	1431	300.5	290.7	-1.8	12.7	7.5	7.5	-0.9	99226.9	65
342	7.5	50.2	1217	300.5	290.7	-1.8	11.9	8.4	6.6	-0.9	99226.7	65
343	7.3	49.6	1117	300.5	290.7	-1.8	11.6	8.0	6.9	-0.9	99226.8	65
344	7.2	49.4	1084	300.5	290.7	-1.8	11.5	7.1	6.5	-0.9	99226.8	65
345	7.1	48.8	1034	300.5	290.7	-1.8	11.3	6.7	6.5	-0.9	99226.6	65
346	7.0	48.6	1007	300.5	290.7	-1.8	11.2	7.4	7.5	-0.9	99226.7	65
347	7.1	49.3	1039	300.5	290.7	-1.8	11.3	7.7	7.1	-0.9	99226.7	65
348	7.2	49.8	1109	300.5	290.7	-1.8	11.6	8.1	7.8	-0.9	99226.7	65
349	7.3	49.9	1125	300.5	290.7	-1.8	11.6	7.3	6.9	-0.9	99226.6	65
350	7.3	49.8	1118	300.5	290.7	-1.6	11.6	8.9	7.4	-0.9	99226.6	65
351	7.1	49.1	1058	300.5	290.7	-1.6	11.4	8.8	7.8	-0.9	99226.9	65
352	7.1	49.1	1039	300.5	290.7	-1.5	11.3	8.9	7.9	-0.9	99226.7	65

Table E.01 Measurement data - Turbine ON

Project: North Kent Wind Farm - Turbine T36 - IEC 61400-11 Measurement

Report ID:17283.01.T36.RP2

Created on: 2/22/2019

***Blank data denotes values that were omitted in the analysis due to an extraneous event during recording

Data Point #	Standardized Wind Speed	LAeq	Turbine Power Output (kW)	Reference Yaw Angle (°)	Yaw Angle (°)	Pitch Angle (°)	Rotor RPM	Nacelle Anemometer Wind Speed (m/s)	10m Anemometer Wind Speed (m/s)	Air Temperature (-C)	Pressure (kPa)	Relative Humidity (%)
353	7.4	50.4	1164	300.5	290.7	-1.5	11.8	8.5	7.5	-0.9	99226.8	65
354	7.6	51.3	1300	300.5	290.7	-1.5	12.3	8.3	7.2	-0.9	99226.7	65
355	8.1	52.9	1529	300.5	290.6	-1.4	13.0	7.6	7.6	-0.9	99226.6	65
356	8.1	52.9	1523	300.5	290.6	-1.9	13.0	8.3	7.7	-0.9	99226.8	65
357	8.0	52.7	1468	300.5	288.6	-2.0	12.9	9.2	7.4	-0.9	99226.6	65
358	8.2	52.8	1571	300.5	287.8	-1.9	13.1	9.3	8.4	-0.9	99226.6	65
359	9.1	53.1	2102	300.5	287.9	0.1	13.3	8.9	9.0	-0.9	99226.8	65
360	9.6	53.1	2360	300.5	287.8	0.3	13.2	9.2	7.9	-0.9	99226.8	65
361	9.0	52.9	2072	300.5	287.8	-1.1	13.0	8.9	6.7	-0.9	99227.0	65
362	8.6	52.8	1837	300.5	287.8	-1.2	13.1	8.8	7.5	-0.9	99226.9	65
363	8.9	52.9	2019	300.5	287.8	-0.8	13.2	9.2	7.8	-0.9	99226.8	65
364	8.8	52.9	1955	300.5	287.9	-1.2	13.1	8.3	6.9	-0.9	99227.1	65
365	8.7	53.1	1891	300.5	287.9	-1.2	13.1	8.8	6.3	-0.9	99226.9	65
366	8.7	53.1	1896	300.5	287.9	-1.2	13.1	8.9	6.8	-0.9	99227.0	65
367	9.3	53.4	2204	300.5	287.9	-0.4	13.2	9.0	6.5	-0.9	99226.8	65
368	10.2	53.4	2578	300.5	287.9	0.5	13.2	10.1	6.8	-0.9	99226.8	65
369			2658	300.5	287.9	0.1	13.1	9.8	8.7	-0.9	99227.1	65
370			2594	300.5	287.9	-0.6	13.0	10.3	7.6	-0.9	99226.7	65
371	10.2	53.0	2562	300.5	287.9	-0.9	13.0	9.6	7.1	-0.9	99226.8	65
372	9.5	52.8	2300	300.5	287.9	-0.8	13.0	9.5	8.2	-0.9	99227.0	65
373	11.1	53.2	2710	300.5	287.8	0.1	13.2	11.5	7.9	-0.9	99226.9	65
374	10.9	53.3	2802	300.5	287.8	0.4	13.2	11.3	8.0	-0.9	99227.4	65
375	10.9	53.2	2840	300.5	287.8	1.9	13.4	11.2	9.7	-0.9	99227.4	65
376	11.1	53.0	2836	300.5	287.8	2.8	13.4	11.5	7.8	-0.9	99226.9	65
377	11.4	52.5	2868	300.5	287.8	4.7	13.5	11.7	7.7	-0.9	99226.9	65
378	10.8	52.0	2732	300.5	287.9	2.8	12.9	11.2	7.6	-0.9	99227.0	65
379	9.9	52.6	2488	300.5	287.9	1.2	12.9	10.2	7.7	-0.9	99226.9	65
380	10.2	52.4	2569	300.5	287.9	1.2	13.0	11.6	8.3	-0.9	99227.2	65
381	10.6	52.6	2639	300.5	287.8	1.0	13.1	11.0	7.1	-0.9	99226.9	65
382	11.9	53.1	2819	300.5	287.8	2.1	13.3	12.3	8.0	-0.9	99226.8	65
383			2598	300.5	287.8	0.8	13.0	10.1	8.2	-0.9	99226.8	65
384	9.5	52.6	2290	300.5	287.8	-0.5	13.0	10.2	7.3	-0.9	99227.0	65
385	9.0	52.7	2053	300.5	287.8	-1.0	13.0	9.9	9.2	-0.9	99226.8	65
386	9.2	52.7	2133	300.5	287.8	-0.7	13.1	9.7	7.9	-0.9	99227.2	65
387	9.1	53.3	2113	300.5	287.8	-1.1	13.1	7.6	7.4	-0.9	99226.7	65
388	9.7	53.1	2389	300.5	287.8	0.1	13.2	10.8	9.7	-0.9	99226.8	65
389	9.7	53.1	2402	300.5	287.9	-0.3	13.1	9.6	9.2	-0.9	99226.8	65
390	9.7	53.2	2385	300.5	287.9	-0.5	13.1	9.6	8.6	-0.9	99227.0	65
391	11.2	53.3	2819	300.5	287.9	1.3	13.4	11.6	9.0	-0.9	99226.9	65
392	10.5	52.7	2838	300.5	287.9	2.6	13.4	10.8	8.5	-0.9	99226.8	65
393	10.6	52.5	2778	300.5	287.9	1.9	13.1	11.0	7.5	-0.9	99227.0	65
394	9.8	52.2	2443	300.5	287.9	0.1	12.9	11.1	8.2	-0.9	99226.9	65
395	9.5	53.0	2281	300.5	287.9	-0.9	13.1	9.8	7.3	-0.9	99227.0	65
396	9.5	53.2	2285	300.5	287.9	-0.6	13.1	10.1	7.1	-0.9	99227.2	65
397	8.7	52.9	1869	300.5	287.8	-1.2	13.0	9.0	8.3	-0.9	99227.0	65
398	9.3	52.8	2212	300.5	287.8	0.4	13.2	9.3	8.7	-0.9	99227.1	65
399	9.8	52.3	2415	300.5	287.8	0.7	13.1	9.6	7.3	-0.9	99227.0	65
400	9.5	52.9	2314	300.5	287.8	-0.2	13.0	9.8	7.9	-0.9	99226.9	65
401	9.9	52.9	2499	300.5	287.8	-0.2	13.1	9.7	7.3	-0.9	99226.9	65
402	10.9	53.0	2687	300.5	287.8	-0.2	13.1	11.3	7.1	-0.9	99226.9	65
403			2726	300.5	287.8	-0.7	13.1	9.8	7.5	-0.9	99226.8	65
404			2682	300.5	287.9	-0.8	13.0	9.9	7.5	-0.9	99234.8	65
405	10.1	52.7	2543	300.5	287.9	-0.9	13.0	11.0	7.6	-0.9	99238.9	65
406	10.5	53.1	2665	300.5	287.9	-0.7	13.1	10.9	7.6	-0.9	99238.7	65
407	10.8	52.9	2655	300.5	287.9	-0.9	13.0	11.2	8.6	-0.9	99239.0	65
408	10.6	53.3	2757	300.5	289.1	-0.3	13.2	11.0	7.6	-0.9	99238.8	65
409			2657	300.5	290.6	-0.7	13.0	10.0	7.9	-0.9	99238.7	65
410	9.8	53.0	2440	300.5	290.6	-0.9	13.0	9.9	7.6	-0.9	99238.9	65
411	9.5	52.8	2276	300.5	290.6	-1.0	13.0	9.2	7.5	-0.9	99238.8	65
412	9.3	52.8	2179	300.5	290.6	-1.1	13.1	9.1	8.3	-0.9	99239.0	65
413	9.4	53.3	2260	300.5	290.6	-1.0	13.1	9.4	8.2	-0.9	99238.8	65
414	9.5	53.3	2284	300.5	290.5	-1.0	13.1	9.5	8.5	-0.9	99239.0	65
415	9.4	53.0	2226	300.5	290.5	-1.0	13.1	10.7	8.1	-0.9	99238.9	65
416	9.6	52.8	2315	300.5	290.5	-1.0	13.1	9.3	7.4	-0.9	99238.9	64
417	9.9	53.0	2471	300.5	290.5	-0.1	13.2	10.7	7.0	-0.9	99226.7	64
418	9.9	52.8	2502	300.5	290.5	-0.4	13.0	10.1	6.8	-0.9	99226.8	64
419	9.7	52.9	2377	300.5	290.6	-0.9	13.0	9.5	7.5	-0.9	99226.8	64
420	9.3	53.0	2188	300.5	290.6	-1.0	13.0	9.1	6.8	-0.9	99226.8	64
421	9.1	52.9	2093	300.5	290.6	-1.0	13.0	9.6	6.0	-0.9	99233.4	65
422	8.8	53.0	1956	300.5	290.6	-1.2	13.1	9.0	7.2	-0.9	99239.0	65
423	8.9	52.8	1988	300.5	290.6	-1.2	13.1	10.3	8.1	-0.9	99238.9	65
424	8.9	53.0	1993	300.5	290.6	-1.2	13.1	10.2	7.7	-0.9	99238.8	65
425	9.0	53.4	2058	300.5	290.6	-1.0	13.2	9.1	7.5	-0.9	99238.8	65
426	9.5	53.1	2270	300.5	290.6	0.1	13.2	9.0	6.1	-0.9	99238.8	65
427	9.4	53.5	2229	300.5	290.6	-0.5	13.1	9.0	5.5	-0.9	99239.0	65
428	9.1	53.4	2077	300.5	290.6	-1.1	13.1	8.6	5.9	-0.9	99238.9	66
429	9.3	52.9	2187	300.5	290.6	-0.7	13.1	9.1	6.5	-0.9	99239.1	66
430	9.3	53.1	2203	300.5	290.6	-0.9	13.1	8.8	7.8	-0.9	99238.8	66
431	9.7	53.6	2404	300.5	290.6	-0.7	13.1	9.7	7.2	-0.9	99238.8	66
432	10.5	53.2	2611	300.5	290.6	-0.6	13.1	10.9	6.0	-0.9	99238.8	66
433	10.4	53.6	2652	300.5	290.6	-0.8	13.1	10.7	5.8	-0.9	99239.2	66
434			2688	300.5	290.6	-0.7	13.1	10.3	6.9	-0.9	99239.1	66
435			2754	300.5	290.6	-0.6	13.1	9.8	6.4	-0.9	99239.1	66
436			2765	300.5	290.6	-0.2	13.1	10.0	5.5	-0.9	99239.0	66
437			2590	300.5	290.6	-0.8	13.0	10.1	5.7	-0.9	99239.1	66
438	10.0	54.8	2531	300.5	290.6	-0.7	13.0	10.9	6.1	-0.9	99239.2	66
439	9.9	53.3	2466	300.5	290.6	-0.9	13.0	9.7	6.8	-0.9	99239.1	66
440	9.5	53.1	2274	300.5	290.6	-1.0	13.0	9.9	7.3	-0.9	99239.2	66

***Blank data denotes values that were omitted in the analysis due to an extraneous event during recording

Data Point #	Standardized Wind Speed	LAeq	Turbine Power Output (kW)	Reference Yaw Angle (°)	Yaw Angle (°)	Pitch Angle (°)	Rotor RPM	Nacelle Anemometer Wind Speed (m/s)	10m Anemometer Wind Speed (m/s)	Air Temperature (-C)	Pressure (kPa)	Relative Humidity (%)
441	9.5	53.2	2300	300.5	290.6	-0.7	13.1	9.9	6.9	-0.9	99239.2	66
442	9.3	52.7	2189	300.5	290.6	-0.9	13.0	8.8	6.8	-0.9	99239.2	66
443	8.8	52.8	1931	300.5	290.6	-1.2	13.0	9.0	7.4	-0.9	99239.1	66
444	9.3	52.8	2184	300.5	290.6	0.3	13.2	9.5	7.3	-0.9	99239.2	66
445	9.1	52.4	2076	300.5	290.6	-0.5	13.0	8.5	6.7	-0.9	99239.2	66
446	8.9	52.8	1973	300.5	290.6	-1.2	13.1	9.3	6.8	-0.9	99239.3	66
447	9.0	53.0	2063	300.5	290.6	-1.1	13.2	9.1	7.0	-0.9	99239.2	66
448	9.5	52.5	2297	300.5	290.6	-0.1	13.2	9.5	6.9	-0.9	99239.3	66
449	9.4	52.8	2256	300.5	290.6	-0.8	13.1	9.0	7.3	-0.9	99239.1	66
450	8.9	52.5	1993	300.5	290.6	-1.1	13.0	8.7	7.0	-0.9	99239.2	66
451	8.9	52.7	1988	300.5	290.6	-1.1	13.1	8.8	6.6	-0.9	99239.0	66
452	8.7	53.3	1899	300.5	290.6	-1.2	13.1	9.7	6.0	-0.9	99239.0	66
453	8.5	53.0	1794	300.5	290.6	-1.2	13.1	9.7	7.0	-0.9	99238.8	66
454	8.3	53.3	1644	300.5	291.2	-1.4	13.1	9.0	6.8	-0.9	99238.9	66
455	8.3	52.9	1659	300.5	292.8	-1.4	13.1	8.9	6.5	-0.9	99239.0	66
456	8.3	53.0	1649	300.5	293.2	-1.4	13.1	9.9	5.9	-0.9	99239.3	66
457	8.0	52.5	1509	300.5	295.2	-1.6	13.0	9.1	5.5	-0.9	99238.9	66
458	7.9	52.9	1438	300.5	295.3	-1.7	12.8	8.4	6.0	-0.9	99238.9	66
459	7.7	52.1	1319	300.5	295.3	-1.8	12.4	8.1	7.2	-0.9	99238.8	66
460	7.5	51.4	1232	300.5	295.4	-1.8	12.1	7.9	7.7	-0.9	99238.8	66
461	7.5	50.4	1213	300.5	295.4	-1.6	12.0	7.3	6.8	-0.9	99238.8	66
462	7.4	50.3	1198	300.5	295.4	-1.6	12.0	7.8	7.6	-0.9	99238.9	65
463	7.4	50.3	1184	300.5	295.4	-1.5	11.9	8.0	7.5	-0.9	99238.8	65
464	7.2	49.8	1103	300.5	295.3	-1.5	11.6	7.7	7.3	-0.9	99239.0	65
465	7.1	49.7	1061	300.5	295.3	-1.5	11.5	7.6	6.9	-0.9	99238.9	65
466	7.2	50.2	1078	300.5	295.3	-1.5	11.5	7.8	6.7	-0.9	99238.9	65
467	7.2	50.3	1071	300.5	295.3	-2.0	11.5	7.3	7.8	-0.9	99238.8	65
468	7.1	50.3	1016	300.5	295.3	-2.1	11.3	8.7	6.7	-0.9	99238.8	65
469	6.8	49.5	928	300.5	295.3	-2.1	11.0	8.6	6.7	-0.9	99238.8	65
470	6.9	49.0	945	300.5	295.4	-2.1	11.1	8.2	7.2	-0.9	99238.8	65
471	7.2	50.1	1067	300.5	295.3	-2.1	11.5	8.2	7.0	-0.9	99238.8	65
472	8.0	52.1	1475	300.5	295.3	-1.3	12.8	8.4	6.2	-0.9	99238.8	65
473	8.7	52.4	1863	300.5	295.3	-0.6	13.3	8.3	6.8	-0.9	99239.1	65
474	8.6	52.9	1798	300.5	295.3	-1.2	13.2	8.5	5.9	-0.9	99239.0	66
475	8.3	52.5	1669	300.5	295.3	-1.4	13.1	7.8	6.0	-0.9	99239.0	66
476	8.7	52.9	1855	300.5	294.1	-1.3	13.2	7.9	5.0	-0.9	99239.1	66
477	8.9	53.0	1991	300.5	292.6	-1.1	13.2	8.7	4.5	-0.9	99239.1	66
478	9.0	52.9	2060	300.5	292.6	-1.1	13.2	8.5	5.7	-0.9	99239.5	66
479	9.0	52.8	2049	300.5	292.7	-1.1	13.1	8.7	5.5	-0.9	99239.2	66
480	9.3	52.7	2175	300.5	292.8	-1.1	13.2	9.9	5.8	-0.9	99239.0	66
481	9.3	52.9	2210	300.5	292.8	-1.1	13.1	10.0	7.3	-0.9	99239.1	67
482	8.9	52.6	1993	300.5	292.8	-1.1	13.0	9.2	6.9	-0.9	99238.9	67
483	8.5	52.4	1774	300.5	292.8	-1.3	13.0	9.2	6.8	-0.9	99239.0	67
484	8.2	52.7	1612	300.5	292.8	-1.5	13.0	8.8	6.8	-0.9	99239.0	67
485	8.0	51.9	1505	300.5	292.8	-1.4	13.0	9.0	6.3	-0.9	99238.9	67
486	7.7	51.2	1345	300.5	292.8	-1.5	12.5	8.4	5.9	-0.9	99239.0	66
487	7.6	50.8	1275	300.5	292.8	-1.5	12.2	7.9	6.0	-0.9	99239.0	66
488	7.8	51.6	1379	300.5	292.8	-1.5	12.6	8.5	6.4	-0.9	99239.0	66
489	7.7	51.4	1351	300.5	292.8	-1.5	12.5	8.4	6.1	-0.9	99239.1	66
490	7.5	50.7	1231	300.5	292.7	-1.5	12.0	8.3	6.2	-0.9	99239.1	66
491	7.3	49.8	1132	300.5	292.7	-2.0	11.7	7.7	7.0	-0.9	99239.2	66
492	7.6	51.5	1303	300.5	292.7	-2.0	12.4	7.2	6.7	-0.9	99239.4	66
493	8.3	53.0	1670	300.5	292.7	-1.3	13.2	7.6	6.0	-0.9	99239.7	66
494	8.1	52.3	1554	300.5	292.7	-1.9	13.0	8.6	6.0	-0.9	99239.3	66
495	7.7	51.6	1354	300.5	292.7	-2.1	12.5	8.7	6.3	-0.9	99239.2	66
496	7.3	50.0	1134	300.5	292.7	-1.9	11.7	6.9	6.4	-0.9	99239.1	66
497	7.3	49.6	1114	300.5	292.7	-1.8	11.7	7.6	6.8	-0.9	99245.4	66
498	7.6	51.3	1269	300.5	292.7	-1.8	12.2	7.7	7.1	-0.9	99252.6	66
499	7.9	52.3	1416	300.5	292.7	-1.8	12.7	8.4	6.2	-0.9	99252.5	66
500	7.6	51.1	1304	300.5	292.7	-1.8	12.3	7.5	7.1	-0.9	99252.5	66
501	7.3	50.1	1148	300.5	292.7	-1.8	11.8	8.0	6.6	-0.9	99252.4	66
502	7.4	50.9	1192	300.5	294.7	-1.6	12.0	7.4	6.7	-0.9	99252.4	66
503	7.7	51.4	1316	300.5	295.2	-1.6	12.4	7.1	7.9	-0.9	99252.5	66
504	8.5	52.7	1788	300.5	295.2	-0.1	13.2	8.7	7.9	-0.9	99252.5	66
505	9.1	52.4	2113	300.5	295.2	0.5	13.2	9.0	6.9	-0.9	99252.4	66
506	9.0	52.4	2036	300.5	295.2	-0.1	13.1	9.9	7.1	-0.9	99252.6	66
507	8.4	52.4	1682	300.5	295.2	-1.1	13.0	8.2	8.0	-0.9	99252.8	66
508	8.3	52.3	1646	300.5	294.5	-1.3	13.1	7.3	6.9	-0.9	99253.2	66
509	7.9	51.9	1452	300.5	292.4	-1.7	12.8	7.5	7.1	-0.9	99252.9	65
510	7.5	50.6	1252	300.5	292.4	-1.8	12.1	7.9	7.1	-0.9	99252.8	65
511	7.8	51.8	1405	300.5	292.4	-1.1	12.8	8.9	7.9	-0.9	99252.8	65
512	11.2	53.1	2842	320.0	324.1	5.3	13.4	11.5	7.2	-3.4	99148.0	65
513	10.3	52.8	2717	320.0	324.1	3.3	12.9	10.7	7.9	-3.4	99168.5	65
514	10.8	52.7	2741	320.0	324.0	2.6	13.0	11.1	8.5	-3.4	99183.5	65
515	10.7	53.2	2782	320.0	324.0	3.0	13.2	11.1	10.9	-3.4	99244.3	65
516	12.0	53.0	2816	320.0	324.0	4.0	13.3	12.4	11.6	-3.4	99272.4	65
517	10.9	52.3	2779	320.0	324.0	4.0	13.1	11.2	10.9	-3.4	99277.9	65
518	11.3	53.0	2787	320.0	324.0	3.8	13.3	11.7	11.6	-3.4	99279.9	65
519	12.3	52.7	2809	320.0	324.1	5.1	13.3	12.7	9.7	-3.4	99280.7	65
520	11.2	53.0	2676	320.0	324.1	2.9	12.9	11.6	9.5	-3.4	99281.0	65
521	11.6	52.9	2840	320.0	324.1	5.1	13.5	12.0	10.0	-3.4	99281.0	65
522	10.4	52.4	2752	320.0	324.1	4.4	13.0	10.7	11.1	-3.4	99280.9	65
523	10.8	52.3	2610	320.0	324.1	2.3	12.8	11.1	11.1	-3.4	99280.2	65
524	10.2	54.1	2576	320.0	324.1	1.3	12.9	11.1	10.3	-3.4	99278.9	65
525	10.4	55.0	2837	320.0	324.1	3.3	13.5	10.8	10.3	-3.4	99278.6	65
526	11.6	53.2	2935	320.0	324.1	6.7	13.9	12.0	10.5	-3.4	99278.3	65
527	12.2	52.7	2825	320.0	324.1	6.6	13.4	12.6	9.8	-3.4	99278.8	65
528	12.5	52.4	2796	320.0	324.1	6.9	13.2	12.9	9.0	-3.4	99279.4	65

Table E.01 Measurement data - Turbine ON

Project: North Kent Wind Farm - Turbine T36 - IEC 61400-11 Measurement
Report ID:17283.01.T36.RP2

Created on: 2/22/2019

***Blank data denotes values that were omitted in the analysis due to an extraneous event during recording

Data Point #	Standardized Wind Speed	LAeq	Turbine Power Output (kW)	Reference Yaw Angle (°)	Yaw Angle (°)	Pitch Angle (°)	Rotor RPM	Nacelle Anemometer Wind Speed (m/s)	10m Anemometer Wind Speed (m/s)	Air Temperature (-C)	Pressure (kPa)	Relative Humidity (%)
529	11.2	52.3	2784	320.0	324.1	7.0	13.2	11.5	9.4	-3.4	99280.7	65
530	11.7	52.0	2712	320.0	324.1	5.7	12.9	12.1	9.3	-3.4	99281.5	65
531	11.4	51.9	2627	320.0	324.1	3.7	12.7	11.7	8.6	-3.4	99281.7	65
532	10.3	52.6	2721	320.0	324.1	2.9	12.9	10.7	7.9	-3.4	99281.7	65
533	10.3	52.7	2786	320.0	324.1	3.5	13.2	10.7	9.4	-3.4	99281.2	65
534	11.2	53.6	2833	320.0	324.1	5.0	13.4	11.6	9.9	-3.4	99281.1	65
535	11.1	52.8	2795	320.0	324.1	5.3	13.2	11.5	9.6	-3.4	99281.0	65
536	11.1	52.2	2752	320.0	324.1	4.6	13.1	11.5	9.5	-3.4	99281.3	64
537	10.5	52.7	2768	320.0	324.1	4.6	13.1	10.9	8.8	-3.4	99281.3	64
538	11.4	52.1	2768	320.0	324.1	4.7	13.1	11.8	9.5	-3.4	99281.7	64
539	11.4	53.2	2718	320.0	324.1	3.3	12.9	11.8	9.4	-3.4	99281.9	64
540	10.8	52.9	2757	320.0	324.1	3.2	13.1	11.2	8.9	-3.4	99281.8	64
541	11.1	53.0	2757	320.0	324.1	3.1	13.0	11.5	8.3	-3.4	99286.0	64
542	10.3	52.9	2651	320.0	324.1	1.2	12.8	10.7	7.6	-3.4	99296.1	65
543	10.5	53.5	2662	320.0	324.1	1.0	13.0	10.8	9.0	-3.4	99296.0	65
544	9.9	53.2	2466	320.0	324.1	0.0	13.0	10.6	8.8	-3.4	99295.5	65
545	9.6	53.8	2362	320.0	324.1	-0.6	13.0	10.3	7.8	-3.4	99293.6	65
546	9.5	53.2	2280	320.0	324.1	-0.9	13.0	10.0	7.9	-3.4	99286.6	65
547	9.4	53.3	2259	320.0	324.1	-0.7	13.1	10.1	8.6	-3.4	98332.8	65
548	9.6	53.6	2342	320.0	324.1	-0.9	13.0	9.4	8.0	-3.4	97423.6	65
549	8.9	53.1	1984	320.0	324.1	-1.0	13.0	8.3	7.6	-3.4	96962.6	65
550	9.4	53.4	2240	320.0	324.0	-0.4	13.2	9.4	8.5	-3.4	96074.1	65
551	9.5	53.1	2283	320.0	324.0	-0.9	13.1	9.6	8.9	-3.4	96825.7	65
552	9.9	53.0	2495	320.0	324.0	-0.2	13.1	10.0	9.5	-3.4	97958.8	65
553			2624	320.0	324.0	-0.4	13.1	10.0	8.3	-3.4	97621.8	65
554	10.1	54.2	2552	320.0	322.9	-0.9	13.0	10.0	7.7	-3.4	98767.8	65
555	9.7	53.2	2407	320.0	320.7	-0.9	13.0	10.3	8.4	-3.4	99226.9	65
556	9.5	53.3	2272	320.0	320.7	-1.0	13.1	10.5	8.4	-3.4	99265.5	65
557	9.5	53.6	2303	320.0	320.7	-1.0	13.1	9.8	7.7	-3.4	99275.5	65
558	9.0	53.5	2072	320.0	320.7	-1.1	13.0	9.3	7.2	-3.4	99279.4	65
559	9.2	53.1	2168	320.0	320.7	-0.4	13.2	9.9	6.9	-3.4	99287.3	65
560	9.5	53.1	2283	320.0	320.7	-0.5	13.1	10.1	6.3	-3.4	99296.4	66
561	9.5	53.3	2279	320.0	320.7	-0.6	13.1	10.4	7.6	-3.4	99296.8	66
562			2613	320.0	320.7	-0.1	13.1	9.6	6.7	-3.4	99296.8	66
563			2729	320.0	320.7	-0.2	13.1	9.5	5.7	-3.4	99297.4	66
564			2747	320.0	320.0	-0.1	13.1	10.3	5.9	-3.4	99297.5	66
565	10.8	53.3	2611	320.0	318.2	-0.6	13.0	11.1	6.0	-3.4	99297.6	66
566	9.7	53.4	2394	320.0	318.2	-0.4	13.0	9.9	6.2	-3.4	99297.7	67
567			2654	320.0	318.2	-0.2	13.1	10.3	6.6	-3.4	99297.9	67
568	9.7	53.5	2405	320.0	318.2	-0.9	13.0	10.0	6.6	-3.4	99297.8	67
569			2589	320.0	318.2	-0.2	13.1	10.0	6.7	-3.4	99297.9	67
570			2809	320.0	318.2	0.9	13.3	10.5	6.8	-3.4	99298.0	67
571	10.7	53.0	2833	320.0	318.3	2.3	13.4	11.0	6.7	-3.4	99298.0	67
572			2771	320.0	318.3	1.8	13.1	10.5	6.1	-3.4	99298.0	67
573	10.3	53.1	2723	320.0	318.3	0.8	13.0	10.7	6.9	-3.4	99298.0	67
574	10.4	53.2	2758	320.0	318.3	0.7	13.1	10.7	7.3	-3.4	99297.9	67
575			2788	320.0	318.3	1.0	13.2	10.4	8.2	-3.4	99297.9	67
576	10.6	52.9	2856	320.0	318.3	3.4	13.5	10.9	8.7	-3.4	99297.9	67
577			2794	320.0	318.3	3.2	13.2	10.6	9.2	-3.4	99295.1	66
578	11.1	53.1	2803	320.0	317.1	4.3	13.3	11.4	9.8	-3.4	99283.7	65
579	11.5	52.3	2747	320.0	316.0	3.4	13.0	11.9	9.5	-3.4	99283.8	65
580	10.9	52.9	2741	320.0	316.0	2.3	13.0	11.2	10.4	-3.4	99283.5	65
581	11.3	52.9	2869	320.0	316.0	5.3	13.6	11.7	8.6	-3.4	99283.7	65
582	11.1	53.3	2698	320.0	316.0	4.1	13.0	11.4	7.1	-3.4	99283.6	65
583	9.3	52.6	2218	320.0	316.0	1.7	12.8	10.0	8.4	-3.4	99283.7	65
584	9.2	53.1	2128	320.0	316.0	1.2	13.0	9.8	8.1	-3.4	99283.5	64
585	9.1	53.2	2113	320.0	316.0	0.8	13.1	9.2	7.6	-3.4	99283.6	64
586	9.0	53.1	2043	320.0	316.0	0.1	13.0	9.7	8.3	-3.4	99283.5	64
587	9.0	53.4	2058	320.0	316.0	-0.4	13.1	9.5	9.1	-3.4	99283.8	64
588	8.6	53.0	1839	320.0	316.0	-1.2	13.0	8.9	8.1	-3.4	99283.6	64
589	8.1	53.0	1560	320.0	316.0	-1.6	13.0	8.5	8.2	-3.4	99283.7	64
590	8.3	53.0	1678	320.0	316.0	-1.4	13.1	8.9	7.5	-3.4	99283.6	64
591	8.4	53.5	1685	320.0	316.2	-1.4	13.1	10.1	7.7	-3.4	99283.5	64
592	8.3	53.1	1668	320.0	318.9	-1.4	13.1	7.7	8.2	-3.4	99283.3	64
593	8.9	53.2	1973	320.0	319.1	-0.4	13.2	9.4	9.5	-3.4	99283.2	64
594	9.2	53.2	2162	320.0	319.0	-0.7	13.2	8.7	10.1	-3.4	99283.2	64
595	10.0	53.0	2507	320.0	319.1	-0.1	13.2	10.3	9.5	-3.4	99283.1	64
596	9.9	53.6	2500	320.0	319.1	-0.7	13.1	10.5	8.7	-3.4	99283.0	63
597	9.7	53.2	2391	320.0	319.1	-0.8	13.0	10.2	9.5	-3.4	99282.8	63
598	10.4	53.6	2606	320.0	319.1	-0.2	13.1	10.7	9.6	-3.4	99282.3	63
599			2816	320.0	319.1	1.3	13.4	10.5	8.9	-3.4	99281.8	63
600			2850	320.0	319.1	3.1	13.5	9.6	8.9	-3.4	99282.3	63
601	10.3	53.8	2857	320.0	319.1	4.8	13.6	10.6	8.0	-3.4	99282.4	63
602	10.9	53.3	2761	320.0	319.0	4.2	13.1	11.3	7.2	-3.4	99282.8	63
603	10.1	52.4	2542	320.0	319.0	1.9	12.8	11.0	7.9	-3.4	99283.0	63
604	10.0	53.1	2540	320.0	319.1	1.3	12.9	9.6	7.4	-3.4	99282.8	63
605			2602	320.0	316.6	1.3	13.1	9.6	8.5	-3.4	99283.1	63
606			2661	320.0	315.7	0.8	13.1	10.2	9.1	-3.4	99283.3	63
607	9.8	53.0	2456	320.0	314.3	-0.3	13.0	9.8	8.1	-3.4	99283.5	63
608	10.1	53.1	2545	320.0	313.5	-0.5	13.0	10.5	7.5	-3.4	99283.7	64
609			2692	320.0	313.5	-0.5	13.1	9.8	6.7	-3.4	99283.7	64
610	11.3	54.0	2816	320.0	313.4	1.0	13.4	11.6	6.7	-3.4	99284.0	64
611	10.8	53.7	2874	320.0	313.4	3.7	13.7	11.2	6.9	-3.4	99284.1	64
612	11.5	52.5	2777	320.0	313.5	3.5	13.2	11.8	6.7	-3.4	99284.0	64
613	11.0	52.7	2764	320.0	313.4	3.3	13.2	11.3	8.0	-3.4	99280.1	64
614	11.1	52.3	2803	320.0	313.4	4.4	13.3	11.4	9.4	-3.4	99270.5	65
615	11.5	52.4	2753	320.0	313.4	4.0	13.1	11.8	9.2	-3.4	99270.2	65
616	11.4	52.9	2822	320.0	313.5	5.4	13.5	11.8	8.7	-3.4	99270.3	65

***Blank data denotes values that were omitted in the analysis due to an extraneous event during recording

Data Point #	Standardized Wind Speed	LAeq	Turbine Power Output (kW)	Reference Yaw Angle (°)	Yaw Angle (°)	Pitch Angle (°)	Rotor RPM	Nacelle Anemometer Wind Speed (m/s)	10m Anemometer Wind Speed (m/s)	Air Temperature (-C)	Pressure (kPa)	Relative Humidity (%)
617	11.6	52.8	2855	320.0	313.5	7.3	13.6	12.0	8.5	-3.4	99270.2	65
618	12.0	52.4	2843	320.0	313.5	8.5	13.6	12.4	8.5	-3.4	99270.1	65
619	12.0	52.1	2768	320.0	313.5	8.3	13.2	12.4	10.3	-3.4	99270.0	64
620	12.2	51.9	2750	320.0	313.5	8.3	13.2	12.6	9.6	-3.4	99269.7	62
621	11.7	52.4	2698	320.0	313.5	7.1	12.9	12.1	10.5	-3.4	99269.9	62
622	11.6	52.7	2712	320.0	313.5	6.5	12.9	12.0	8.7	-3.4	99270.1	62
623	12.1	53.0	2729	320.0	313.5	6.2	13.0	12.5	8.5	-3.4	99270.2	62
624	11.3	55.3	2711	320.0	315.3	5.4	12.9	11.7	8.4	-3.4	99270.4	62
625	11.2	54.0	2719	320.0	316.1	4.7	12.9	11.6	10.2	-3.4	99270.5	62
626			2714	320.0	316.1	3.8	12.9	10.5	10.2	-3.4	99270.2	61
627			2749	320.0	316.1	3.7	13.1	10.1	10.4	-3.4	99269.5	61
628	10.6	53.4	2780	320.0	316.1	4.3	13.2	10.9	10.2	-3.4	99267.3	61
629	10.8	52.7	2811	320.0	316.1	5.4	13.3	11.1	10.8	-3.4	99260.2	61
630	10.5	53.4	2734	320.0	316.1	4.3	13.0	10.9	9.8	-3.4	99248.8	61
631			2751	320.0	316.1	4.1	13.1	10.3	9.3	-3.4	99255.7	61
632	10.5	53.4	2702	320.0	315.3	2.8	12.9	10.9	8.8	-3.4	99260.9	61
633	10.6	53.1	2735	320.0	313.6	2.4	13.1	10.9	7.9	-3.4	99263.5	61
634	10.6	52.8	2794	320.0	313.6	3.4	13.3	10.9	9.0	-3.4	99266.0	61
635	10.9	52.2	2642	320.0	313.6	2.4	13.0	11.3	9.5	-3.4	99268.0	61
636	9.7	53.3	2368	320.0	313.6	1.3	13.0	10.0	8.3	-3.4	99269.2	61
637	9.6	52.9	2350	320.0	313.6	0.8	13.0	10.2	8.8	-3.4	99269.8	61
638	9.5	53.1	2299	320.0	313.6	0.2	13.1	9.5	9.4	-3.4	99270.2	61
639	9.7	53.4	2410	320.0	313.6	-0.1	13.1	10.0	9.2	-3.4	99270.3	61
640	9.8	53.2	2436	320.0	313.6	-0.5	13.1	10.0	8.1	-3.4	99270.3	61
641	9.5	53.4	2308	320.0	313.6	-1.0	13.1	10.6	7.5	-3.4	99271.0	61
642	9.4	53.1	2262	320.0	313.6	-1.0	13.1	10.0	7.1	-3.4	99271.7	61
643	8.9	52.7	1987	320.0	313.6	-1.1	13.0	9.2	7.1	-3.4	99271.8	62
644	8.6	52.8	1800	320.0	313.6	-1.2	13.1	9.0	7.6	-3.4	99272.0	62
645	9.3	53.3	2209	320.0	313.6	0.0	13.2	9.4	8.1	-3.4	99272.2	62
646			2647	320.0	313.6	1.1	13.2	9.5	8.1	-3.4	99272.3	62
647			2720	320.0	313.6	0.6	13.1	10.3	8.5	-3.4	99272.5	62
648			2761	320.0	313.6	0.4	13.1	10.6	7.6	-3.4	99272.6	62
649			2665	320.0	313.6	-0.5	13.0	10.5	6.8	-3.4	99272.5	63
650			2590	320.0	313.6	-0.9	13.0	10.5	7.5	-3.4	99272.4	63
651	9.7	53.6	2406	320.0	313.6	-1.0	13.0	10.0	8.2	-3.4	99272.5	63
652	9.2	53.5	2125	320.0	311.8	-1.0	13.0	9.0	8.3	-3.4	99272.0	63
653	9.1	53.1	2092	320.0	311.1	-0.9	13.0	9.2	8.8	-3.4	99272.3	63
654	8.7	52.9	1873	320.0	311.1	-1.2	13.0	9.0	7.7	-3.4	99272.1	63
655	8.3	53.0	1679	320.0	311.1	-1.4	13.0	8.5	7.8	-3.3	99272.2	63
656	8.3	52.9	1642	320.0	311.1	-1.4	13.1	9.2	7.4	-3.3	99272.2	62
657	8.1	52.8	1556	320.0	311.1	-1.6	13.1	8.8	8.3	-3.3	99272.0	62
658	8.5	53.2	1765	320.0	311.1	-0.8	13.2	9.0	8.2	-3.3	99271.2	62
659	9.2	53.1	2159	320.0	311.1	-0.2	13.2	10.1	7.7	-3.3	99270.1	62
660	8.9	53.1	1970	320.0	311.1	-1.0	13.1	9.1	7.0	-3.3	99268.7	62
661	9.3	53.8	2189	320.0	311.1	-0.2	13.2	8.7	7.1	-3.3	99265.8	62
662	9.8	52.7	2444	320.0	311.1	0.6	13.1	8.9	6.5	-3.3	99258.1	62
663	9.9	52.9	2464	320.0	311.1	0.0	13.1	9.7	7.3	-3.3	98846.6	62
664	9.9	53.2	2499	320.0	311.1	-0.4	13.1	9.9	7.0	-3.3	98209.5	62
665			2595	320.0	311.1	-0.6	13.1	10.0	6.3	-3.3	98139.4	62
666	10.9	53.8	2837	320.0	311.1	1.2	13.5	11.3	5.7	-3.3	98338.3	62
667	11.6	54.2	2990	320.0	311.1	6.1	14.2	11.9	6.1	-3.3	99216.6	62
668	10.9	52.7	2725	320.0	311.1	4.5	13.1	11.2	5.9	-3.3	99267.3	63
669	10.1	52.8	2549	320.0	311.1	2.4	12.9	11.1	6.2	-3.3	98824.5	63
670			2699	320.0	311.0	2.5	13.0	10.1	6.4	-3.3	97867.9	63
671	11.1	53.5	2711	320.0	311.1	2.8	13.3	11.4	5.9	-3.3	97899.8	63
672	11.4	53.3	2982	320.0	311.1	7.4	14.2	11.8	6.9	-3.3	97649.6	63
673	13.6	52.6	2895	320.0	311.1	8.7	13.7	14.0	6.8	-3.3	98238.3	62
674	12.7	52.2	2827	320.0	311.1	9.1	13.4	13.1	5.9	-3.3	98716.0	62
675	12.5	51.3	2744	320.0	311.1	8.5	13.0	12.9	6.9	-3.3	98473.4	62
676	10.1	52.2	2557	320.0	311.1	5.3	12.4	12.1	6.8	-3.3	98503.6	62
677	8.9	53.1	1979	320.0	311.1	4.3	12.9	10.4	6.1	-3.3	97806.3	62
678	9.5	52.6	2281	320.0	311.0	3.0	12.8	10.5	6.8	-3.3	97898.7	62
679	9.8	53.1	2427	320.0	312.9	1.7	12.9	10.2	8.2	-3.2	98917.0	62
680	10.0	53.1	2525	320.0	313.6	1.2	13.0	10.5	8.8	-3.2	99259.3	62
681	9.7	53.1	2388	320.0	313.7	0.6	13.0	10.0	9.3	-3.2	99233.0	62
682	9.0	53.3	2053	320.0	313.8	-0.9	13.0	10.0	9.9	-3.2	98091.7	62
683	9.7	53.2	2369	320.0	316.4	-0.4	13.2	11.0	9.6	-3.2	98545.6	62
684	10.5	52.9	2746	320.0	316.6	0.1	13.2	10.9	9.0	-3.2	98115.0	62
685	10.3	53.0	2792	320.0	316.6	0.8	13.3	10.6	8.5	-3.2	97718.9	62
686			2649	320.0	316.6	0.5	13.1	9.8	7.9	-3.2	98478.3	62
687	9.4	53.9	2221	320.0	316.6	-1.0	13.0	10.6	7.3	-3.2	98852.1	62
688	9.3	53.2	2197	320.0	319.3	-1.1	13.1	10.9	6.5	-3.2	99266.1	62
689	9.5	53.2	2290	320.0	319.9	-1.0	13.1	10.0	7.1	-3.2	99270.0	62
690	9.9	53.4	2467	320.0	319.9	-0.3	13.2	10.6	7.0	-3.2	99269.2	62
691			2685	320.0	319.9	0.4	13.1	9.8	8.7	-3.2	99015.6	62
692	10.5	53.8	2635	320.0	319.9	-0.3	13.0	10.9	8.5	-3.2	97515.7	63
693	10.7	54.5	2678	320.0	319.9	-0.6	13.1	11.1	8.2	-3.2	98696.3	63
694	11.1	53.3	2715	320.0	319.9	-0.8	13.0	11.5	7.9	-3.2	99253.2	63
695	9.8	52.9	2436	320.0	319.9	-0.9	12.9	9.6	8.2	-3.2	99263.8	63
696	12.2	52.9	2746	320.0	305.3	8.1	13.0	12.6	9.5	-3.3	99236.9	53
697	12.1	52.8	2740	320.0	305.2	7.4	12.9	12.5	9.3	-3.3	99234.8	53
698	12.4	52.4	2808	320.0	305.3	8.0	13.3	12.8	10.2	-3.3	99238.2	53
699	11.9	53.2	2815	320.0	305.2	8.5	13.3	12.3	10.4	-3.3	99242.4	53
700	12.8	52.9	2814	320.0	305.2	8.8	13.3	13.3	10.0	-3.3	99244.0	54
701	13.0	53.1	2830	320.0	305.3	9.6	13.4	13.4	9.4	-3.3	99246.4	54
702	12.3	52.1	2817	320.0	305.3	10.2	13.3	12.7	8.4	-3.3	99247.2	54
703	12.5	52.0	2760	320.0	305.3	9.5	13.0	12.9	9.2	-3.3	99247.1	54
704	11.4	53.0	2762	320.0	305.3	9.3	13.1	11.8	9.8	-3.3	99247.4	54

Table E.01 Measurement data - Turbine ON

Project: North Kent Wind Farm - Turbine T36 - IEC 61400-11 Measurement
Report ID:17283.01.T36.RP2

Created on: 2/22/2019

***Blank data denotes values that were omitted in the analysis due to an extraneous event during recording

Data Point #	Standardized Wind Speed	LAeq	Turbine Power Output (kW)	Reference Yaw Angle (°)	Yaw Angle (°)	Pitch Angle (°)	Rotor RPM	Nacelle Anemometer Wind Speed (m/s)	10m Anemometer Wind Speed (m/s)	Air Temperature (-C)	Pressure (kPa)	Relative Humidity (%)
705	12.8	52.4	2754	320.0	305.3	8.8	13.0	13.2	11.1	-3.3	99248.3	54
706	11.9	53.4	2778	320.0	305.3	8.9	13.1	12.3	12.2	-3.2	99239.9	53
707	12.8	55.7	2767	320.0	305.3	8.8	13.1	13.2	10.2	-3.2	99238.0	53
708	11.5	54.0	2728	320.0	305.3	7.7	12.9	11.8	9.9	-3.2	99238.1	53
709	11.6	54.0	2761	320.0	305.3	7.5	13.1	11.9	11.0	-3.2	99238.3	53
710	12.2	53.5	2781	320.0	305.3	7.8	13.1	12.6	10.2	-3.2	99238.2	53
711	11.4	53.1	2762	320.0	305.3	7.3	13.0	11.8	10.1	-3.2	99238.6	53
712	11.6	52.3	2783	320.0	305.3	7.3	13.1	12.0	10.9	-3.2	99239.6	53
713	12.0	52.4	2745	320.0	305.3	6.6	13.0	12.4	10.0	-3.2	99239.2	53
714			2770	320.0	303.8	7.0	13.2	12.7	9.8	-3.2	99239.3	53
715			2743	320.0	302.8	6.0	12.9	12.6	10.1	-3.2	99240.0	53
716			2780	320.0	302.9	6.0	13.1	13.1	9.0	-3.2	99241.1	53
717			2789	320.0	302.9	6.2	13.1	12.2	9.5	-3.2	99241.3	53
718			2778	320.0	302.9	6.1	13.1	12.4	9.5	-3.2	99251.9	53
719			2786	320.0	302.9	6.2	13.2	11.2	9.5	-3.2	99252.9	53
720			2814	320.0	302.9	6.9	13.3	11.8	11.0	-3.2	99253.3	53
721			2796	320.0	302.9	6.9	13.2	11.7	10.4	-3.2	99253.2	53
722			2770	320.0	302.9	6.6	13.1	12.2	10.3	-3.2	99252.7	53
723			2754	320.0	302.9	6.1	13.0	12.2	9.7	-3.2	99252.4	53
724			2703	320.0	302.9	4.2	12.8	10.3	9.0	-3.2	99252.5	52
725			2750	320.0	302.7	4.1	13.0	11.3	8.6	-3.2	99252.0	51
726			2782	320.0	300.4	4.4	13.1	11.6	8.6	-3.2	99252.2	51
727			2733	320.0	300.3	3.4	12.9	11.2	8.6	-3.2	99253.3	51
728			2687	320.0	300.3	1.6	12.8	10.2	9.5	-3.2	99253.4	51
729			2780	320.0	300.3	1.9	13.1	11.0	9.7	-3.2	99253.8	51
730			2859	320.0	300.3	3.9	13.5	11.2	8.9	-3.2	99253.6	52
731			2898	320.0	300.3	6.1	13.7	11.6	9.6	-3.2	99253.5	52
732			2863	320.0	300.3	7.2	13.5	11.5	9.4	-3.2	99253.4	52
733			2819	320.0	300.3	7.5	13.4	13.1	8.7	-3.2	99253.2	52
734			2770	320.0	300.3	7.3	13.1	12.9	8.4	-3.2	99253.0	52
735			2720	320.0	300.3	6.1	12.9	12.0	9.8	-3.2	99252.4	52
736			2726	320.0	300.3	5.3	12.9	11.2	7.8	-3.1	99250.8	53
737			2649	320.0	300.9	3.2	12.7	11.9	9.7	-3.1	99248.6	53
738			2621	320.0	303.2	2.1	12.9	10.4	9.2	-3.1	99247.8	53
739			2823	320.0	303.2	3.9	13.4	12.0	9.6	-3.1	99247.4	53
740			2783	320.0	303.2	3.8	13.2	11.9	10.1	-3.1	99247.3	53
741			2770	320.0	303.2	3.4	13.1	11.1	9.8	-3.1	99246.8	53
742			2654	320.0	303.3	1.9	12.9	9.4	8.8	-3.0	99237.5	51
743			2489	320.0	303.3	1.1	12.9	10.9	9.6	-3.0	99236.5	50
744			2320	320.0	303.3	0.3	13.0	10.0	8.7	-3.0	99240.5	50
745			2462	320.0	303.3	0.2	13.1	9.7	10.0	-3.0	99240.6	50
746			2443	320.0	303.3	-0.4	13.0	9.0	9.3	-3.0	99241.7	50
747			2234	320.0	303.3	-1.0	13.1	9.9	8.5	-3.0	99241.8	50
748			2333	320.0	303.3	-0.8	13.2	9.9	9.2	-3.0	99241.8	49
749			2426	320.0	303.3	-0.6	13.1	10.5	8.9	-3.0	99242.0	49
750			2368	320.0	303.3	-0.8	13.1	10.1	8.8	-3.0	99242.4	49
751			2660	320.0	303.3	-0.5	13.1	11.7	9.2	-3.0	99242.5	49
752			2536	320.0	303.2	-0.9	13.0	11.3	7.8	-3.0	99242.3	49
753			2454	320.0	303.2	-0.9	13.0	10.9	7.4	-3.0	99241.2	49
754			2394	320.0	303.2	-0.6	13.1	8.7	7.6	-3.0	99240.6	51
755			2710	320.0	303.2	-0.2	13.1	9.5	6.7	-3.0	99240.7	52
756			2690	320.0	303.2	-0.6	13.0	10.3	6.7	-3.0	99240.4	52
757			2460	320.0	303.2	-0.8	13.0	10.2	9.2	-3.0	99240.1	52
758			2530	320.0	303.2	-0.8	13.1	9.6	8.9	-3.0	99239.7	52
759			2599	320.0	303.2	-0.8	13.0	9.1	8.5	-3.0	99239.3	52
760			2144	320.0	303.2	-1.1	13.0	8.9	8.0	-2.8	99238.6	49
761			2440	320.0	303.2	0.3	13.2	10.2	7.6	-2.8	99237.3	49
762			2578	320.0	303.2	0.1	13.1	11.2	7.2	-2.8	99239.9	49
763			2655	320.0	303.2	-0.3	13.1	12.3	7.5	-2.8	99241.2	49
764			2755	320.0	303.2	-0.3	13.1	11.1	7.8	-2.8	99240.6	49
765			2810	320.0	303.3	0.7	13.3	11.7	8.4	-2.8	99240.9	49
766			2854	320.0	303.3	2.4	13.5	11.2	9.6	-2.8	99241.0	51
767			2849	320.0	303.3	3.9	13.5	11.0	9.4	-2.9	99241.5	51
768			2820	320.0	303.3	4.5	13.4	10.3	10.6	-2.9	99240.9	51
769			2751	320.0	303.3	3.5	13.0	11.1	9.5	-2.9	99241.9	51
770			2818	320.0	303.3	4.7	13.4	10.8	9.5	-2.9	99241.0	51
771			2781	320.0	303.3	4.8	13.2	10.2	11.1	-2.9	99241.7	51
772			2782	320.0	303.3	4.8	13.2	12.7	10.6	-2.9	99242.3	50
773	12.0	52.4	2863	320.0	305.7	7.1	13.6	12.4	9.8	-2.9	99242.3	49
774	12.2	53.0	2803	320.0	306.1	7.1	13.3	12.6	9.3	-2.9	99242.0	49
775	11.6	53.3	2802	320.0	306.1	7.7	13.3	12.0	9.6	-2.9	99242.0	49
776	12.5	52.8	2752	320.0	306.1	7.2	13.1	13.0	10.6	-2.9	99241.3	49
777	11.9	52.7	2721	320.0	306.1	6.4	12.9	12.3	9.2	-2.9	99239.8	49
778	11.7	53.1	2676	320.0	306.1	4.5	12.7	12.1	10.2	-2.9	99238.9	50
779	11.2	52.7	2750	320.0	306.1	4.6	13.1	11.6	9.7	-2.9	99232.3	51
780	10.5	52.3	2662	320.0	306.1	2.9	12.8	10.8	10.7	-2.9	98537.8	51
781	10.1	52.7	2549	320.0	306.7	1.4	12.8	10.2	9.6	-2.9	98239.5	51
782	9.6	52.3	2351	320.0	308.5	0.9	13.0	10.6	8.3	-2.9	98197.4	51
783	9.5	53.0	2272	320.0	308.5	0.1	13.0	10.0	8.9	-2.9	98405.1	51
784	10.2	53.1	2578	320.0	308.4	0.9	13.3	10.2	9.2	-2.9	98923.4	50
785	10.8	52.8	2839	320.0	308.5	3.0	13.5	11.1	10.0	-2.9	99196.8	50
786	10.5	52.7	2755	320.0	308.5	1.7	13.0	10.8	9.8	-2.9	99189.9	50
787			2685	320.0	308.5	0.7	13.0	9.4	10.4	-2.9	98543.8	50
788	11.1	53.2	2814	320.0	308.5	2.4	13.4	11.5	9.7	-2.9	98239.2	50
789	11.3	53.1	2785	320.0	308.5	2.4	13.2	11.6	8.9	-2.9	98185.5	50
790	11.6	53.4	2848	320.0	308.5	4.5	13.6	12.0	10.0	-2.9	98124.4	52
791	11.0	52.6	2804	320.0	308.5	5.3	13.4	11.3	9.3	-2.9	98102.3	52
792	11.9	52.2	2787	320.0	308.5	5.6	13.3	12.3	8.4	-2.9	98115.3	52

***Blank data denotes values that were omitted in the analysis due to an extraneous event during recording

Data Point #	Standardized Wind Speed	LAeq	Turbine Power Output (kW)	Reference Yaw Angle (°)	Yaw Angle (°)	Pitch Angle (°)	Rotor RPM	Nacelle Anemometer Wind Speed (m/s)	10m Anemometer Wind Speed (m/s)	Air Temperature (-C)	Pressure (kPa)	Relative Humidity (%)
793	11.2	52.4	2772	320.0	308.5	6.1	13.2	11.6	8.1	-2.9	98277.0	52
794	11.9	53.4	2776	320.0	308.5	6.3	13.3	12.3	8.1	-2.9	98355.4	52
795	12.1	52.3	2776	320.0	308.5	7.0	13.3	12.5	10.0	-2.9	98434.4	52
796	11.3	51.8	2721	320.0	308.5	6.1	13.0	11.6	9.6	-2.8	98365.5	51
797	11.8	52.2	2722	320.0	308.5	5.6	13.0	12.2	8.4	-2.8	98272.2	50
798	10.7	52.6	2700	320.0	308.5	4.6	12.9	11.0	10.4	-2.8	98350.5	50
799	11.8	52.5	2714	320.0	308.5	4.0	12.9	12.2	10.0	-2.8	98244.9	50
800			2720	320.0	308.5	3.2	13.0	9.9	9.9	-2.8	98121.7	50
801	10.3	52.2	2690	320.0	308.5	1.9	12.9	10.7	9.4	-2.8	98003.1	50
802			2728	320.0	308.5	1.7	13.0	10.6	10.6	-2.8	97987.1	51
803			2674	320.0	308.5	1.0	13.0	10.0	9.8	-2.9	97884.4	51
804	10.4	52.7	2750	320.0	308.5	1.0	13.1	10.7	9.9	-2.9	97884.4	51
805	10.3	53.2	2663	320.0	308.5	0.1	13.0	10.7	9.4	-2.9	97948.9	51
806			2744	320.0	307.6	0.1	13.1	9.5	8.8	-2.9	99038.9	51
807			2739	320.0	305.6	-0.5	13.0	10.2	7.9	-2.9	98573.7	51
808			2775	320.0	305.6	-0.1	13.2	10.5	8.5	-3.0	98516.0	51
809	10.3	53.3	2783	320.0	305.6	0.5	13.2	10.6	8.7	-3.0	98629.6	51
810			2708	320.0	305.6	-0.4	13.1	10.0	10.1	-3.0	98338.9	51
811	11.3	53.4	2806	320.0	305.6	1.2	13.3	11.7	9.3	-3.0	97887.2	51
812	11.0	53.8	2798	320.0	305.6	1.7	13.3	11.4	8.4	-3.0	97514.0	51
813	10.7	53.3	2814	320.0	305.6	2.8	13.4	11.0	7.9	-3.0	97318.7	51
814			2585	320.0	305.6	1.2	13.0	10.5	9.7	-3.0	97114.9	51
815	10.0	53.1	2529	320.0	305.6	0.6	13.0	10.6	9.1	-3.0	96839.7	51
816	9.9	53.1	2479	320.0	308.6	-0.4	13.0	10.3	9.4	-3.0	97011.8	51
817	9.0	52.4	2061	320.0	308.6	-1.1	13.0	9.6	9.3	-3.0	96998.1	51
818	8.9	52.9	2011	320.0	308.6	-1.1	13.1	10.1	9.5	-3.0	97130.7	51
819	9.0	53.1	2062	320.0	309.1	-1.1	13.1	9.8	8.4	-3.0	97222.2	51
820	9.3	53.1	2195	320.0	311.2	-1.0	13.2	9.3	9.3	-3.0	97239.2	51
821	9.0	52.8	2030	320.0	311.2	-1.1	13.1	9.8	8.8	-3.0	97323.9	51
822	10.1	52.9	2555	320.0	311.1	1.0	13.3	10.7	8.7	-3.0	97364.7	51
823	11.3	52.7	2721	320.0	311.1	0.8	13.1	11.7	9.6	-3.0	97347.1	51
824	11.1	53.0	2641	320.0	311.1	0.1	13.0	11.4	9.7	-3.0	97361.1	51
825	9.4	53.3	2249	320.0	311.1	-1.0	13.0	9.6	10.2	-3.0	97281.0	51
826	9.6	53.1	2360	320.0	311.0	-0.1	13.1	8.5	9.7	-3.0	97285.0	51
827			2584	320.0	311.0	0.3	13.1	10.4	9.9	-3.0	97119.5	51
828			2765	320.0	311.1	0.6	13.2	10.2	9.3	-3.0	97217.4	51
829	10.4	53.5	2796	320.0	309.2	1.8	13.4	10.8	8.9	-3.0	97275.5	51
830	11.5	53.0	2852	320.0	308.3	3.8	13.6	11.9	8.9	-3.0	97546.0	51
831	12.0	52.9	2822	320.0	308.3	4.8	13.4	12.4	9.4	-3.0	97470.0	52
832	11.0	52.4	2743	320.0	308.2	3.9	13.1	11.4	9.3	-3.0	97395.7	54
833	10.3	52.4	2708	320.0	308.2	2.3	12.9	10.7	8.8	-3.0	97399.5	54
834	11.9	52.7	2776	320.0	308.0	3.6	13.3	12.3	10.4	-3.0	97275.0	54
835	11.4	53.0	2857	320.0	306.1	5.6	13.6	11.8	10.0	-3.0	97358.9	54
836	11.8	52.2	2796	320.0	306.1	6.0	13.3	12.2	9.0	-3.0	97217.4	54
837	11.3	51.5	2710	320.0	306.1	4.5	12.9	11.7	7.8	-2.9	97682.4	53
838	11.1	52.8	2777	320.0	306.1	5.2	13.2	11.4	7.7	-2.9	98053.5	53
839	10.3	52.7	2750	320.0	306.1	5.0	13.1	10.6	7.1	-2.9	97622.9	53
840	11.0	52.9	2730	320.0	306.1	4.3	13.0	11.3	6.0	-2.9	96968.1	53
841	10.5	53.7	2714	320.0	306.1	3.1	12.9	10.9	7.8	-2.9	97059.8	53
842	10.4	53.6	2745	320.0	306.1	3.0	13.0	10.8	8.3	-2.9	96946.3	53
843	11.1	52.6	2730	320.0	306.1	2.2	13.0	11.5	10.0	-2.9	96666.7	53
844	11.2	53.6	2755	320.0	306.1	2.1	13.1	11.5	8.6	-2.9	96563.5	53
845	11.8	53.3	2840	320.0	305.1	4.2	13.6	12.2	8.6	-2.9	96688.8	53
846			2869	320.0	303.6	6.2	13.6	12.2	7.3	-2.9	98106.5	53
847			2745	320.0	303.6	5.0	13.0	11.7	8.0	-2.9	98068.6	53
848			2707	320.0	303.6	3.6	12.9	9.9	7.4	-2.9	98629.7	53
849			2716	320.0	303.6	2.6	12.9	11.8	8.1	-2.9	99012.2	53
850			2835	320.0	303.6	4.6	13.5	13.2	9.2	-2.9	98296.6	53
851			2864	320.0	303.6	6.5	13.6	11.8	9.6	-2.9	96477.6	53
852			2785	320.0	303.6	6.4	13.2	12.7	10.2	-2.9	96454.3	53
853			2721	320.0	303.6	5.2	13.0	11.3	10.2	-2.9	96773.5	53
854			2713	320.0	303.6	4.3	12.9	11.3	10.3	-2.9	97328.0	53
855			2634	320.0	303.6	2.5	12.8	11.1	10.1	-2.9	97722.0	52
856			2448	320.0	303.6	1.3	13.0	11.1	8.3	-2.9	98057.7	52
857			2477	320.0	303.8	0.9	13.0	11.5	8.5	-2.9	98287.8	52
858	9.8	53.7	2422	320.0	306.0	0.3	13.1	10.5	10.2	-2.9	98116.5	52
859	10.3	53.1	2667	320.0	306.1	0.4	13.1	10.6	8.5	-2.9	98042.7	52
860	10.7	52.9	2658	320.0	306.1	-0.2	13.0	11.0	9.4	-2.9	98134.5	52
861	9.3	53.4	2210	320.0	306.1	-1.0	13.0	9.7	10.0	-2.9	98039.0	52
862	9.1	53.4	2087	320.0	306.1	-1.1	13.1	9.1	10.3	-2.9	98035.8	52
863	10.3	53.1	2649	320.0	306.0	1.3	13.4	10.6	10.3	-2.9	98003.9	52
864	12.2	53.6	2995	320.0	306.0	6.4	14.2	12.6	10.0	-2.9	97845.0	52
865	13.4	52.8	2928	320.0	306.1	8.2	13.9	13.8	9.5	-2.9	97726.1	52
866			2811	320.0	304.9	8.3	13.4	12.7	9.2	-2.9	97585.0	52
867			2764	320.0	303.7	8.0	13.1	13.5	10.0	-3.0	97428.2	53
868			2723	320.0	303.7	7.1	12.9	13.3	9.3	-3.0	97570.0	53
869			2759	320.0	303.7	7.1	13.1	12.5	9.4	-3.0	99214.8	53
870			2802	320.0	303.7	7.9	13.3	12.8	11.8	-3.0	99231.5	53
871			2774	320.0	303.7	8.0	13.2	12.2	11.1	-3.0	99236.7	53
872			2773	320.0	303.7	8.1	13.2	12.3	11.3	-3.0	99239.5	52
873	11.7	52.3	2771	310.0	318.2	6.1	13.2	12.1	8.3	-3.1	99259.6	51
874	11.5	51.5	2763	310.0	318.2	6.3	13.1	11.9	8.6	-3.1	99259.5	51
875	12.0	51.9	2771	310.0	318.1	6.2	13.1	12.4	8.8	-3.1	99259.8	51
876	12.5	51.0	2761	310.0	318.1	6.1	13.1	12.9	8.6	-3.1	99259.9	51
877	11.8	52.5	2797	310.0	318.1	6.7	13.3	12.2	9.4	-3.1	99260.0	51
878	12.5	52.0	2814	310.0	318.1	7.3	13.3	12.9	8.6	-3.1	99259.9	51
879	12.7	54.0	2828	310.0	318.1	8.5	13.4	13.1	7.7	-3.1	99263.7	51
880	11.4	52.2	2710	310.0	318.1	7.0	12.9	11.8	8.4	-3.1	99273.1	53

Table E.01 Measurement data - Turbine ON

Project: North Kent Wind Farm - Turbine T36 - IEC 61400-11 Measurement

Report ID:17283.01.T36.RP2

Created on: 2/22/2019

***Blank data denotes values that were omitted in the analysis due to an extraneous event during recording

Data Point #	Standardized Wind Speed	LAeq	Turbine Power Output (kW)	Reference Yaw Angle (°)	Yaw Angle (°)	Pitch Angle (°)	Rotor RPM	Nacelle Anemometer Wind Speed (m/s)	10m Anemometer Wind Speed (m/s)	Air Temperature (-C)	Pressure (kPa)	Relative Humidity (%)
881	11.7	51.6	2721	310.0	318.1	6.1	13.0	12.1	8.1	-3.1	99273.4	53
882	13.4	52.2	2866	310.0	318.1	8.4	13.6	13.8	7.4	-3.1	99273.3	53
883	13.1	52.0	2819	310.0	318.1	9.0	13.4	13.5	8.0	-3.1	99272.5	53
884	12.1	51.1	2672	310.0	318.2	6.7	12.7	12.5	7.6	-3.1	99272.4	53
885	11.8	51.2	2704	310.0	318.1	5.4	12.9	12.2	8.1	-3.0	99272.5	53
886	11.9	53.3	2873	310.0	318.1	8.0	13.7	12.3	8.2	-3.0	99273.0	55
887	14.0	54.3	2985	310.0	318.1	11.4	14.2	14.4	8.4	-3.0	99273.3	55
888	13.5	52.4	2869	310.0	318.2	12.2	13.6	14.0	8.8	-3.0	99273.5	55
889	14.1	52.0	2763	310.0	318.2	11.7	13.2	14.6	9.6	-3.0	99273.6	55
890	14.3	54.0	2743	310.0	318.2	11.5	13.1	14.7	10.4	-3.0	99273.6	55
891	12.9	53.2	2716	310.0	318.2	10.8	12.9	13.3	10.8	-2.9	99269.6	54
892	13.2	52.6	2741	310.0	318.2	10.7	13.1	13.6	10.4	-2.9	99260.1	51
893	13.3	51.1	2745	310.0	318.2	10.5	13.1	13.7	10.4	-2.9	99260.0	51
894	12.7	53.1	2751	310.0	318.2	10.5	13.1	13.1	11.1	-2.9	99260.0	51
895	13.3	53.6	2753	310.0	318.2	10.4	13.1	13.8	12.4	-2.9	99259.1	51
896	12.4	54.6	2713	310.0	318.2	9.4	12.9	12.8	12.2	-2.9	99259.7	51
897	13.2	53.4	2786	310.0	316.8	10.2	13.3	13.7	10.7	-2.9	99259.4	50
898	13.8	53.4	2817	310.0	315.5	11.1	13.4	14.2	9.5	-3.0	99259.3	49
899	13.1	53.4	2722	310.0	315.5	10.1	12.9	13.5	9.3	-3.0	99259.4	49
900	11.9	55.7	2657	310.0	315.5	8.2	12.6	12.3	9.5	-3.0	99259.7	49
901	12.1	53.2	2691	310.0	315.5	7.0	12.8	12.5	10.2	-3.0	99259.9	49
902	11.7	52.4	2800	310.0	315.5	8.1	13.3	12.1	10.7	-3.0	99259.9	49
903	12.1	51.8	2788	310.0	315.5	8.3	13.2	12.5	11.7	-3.0	99259.9	49
904	12.3	52.5	2803	310.0	315.5	8.7	13.3	12.7	11.7	-3.0	99259.9	49
905	12.3	52.7	2803	310.0	314.9	9.4	13.3	12.8	11.3	-3.0	99259.9	49
906	13.0	53.2	2806	310.0	313.3	9.9	13.3	13.5	10.9	-3.0	99259.8	49
907	13.1	52.2	2752	310.0	313.3	9.3	13.1	13.6	11.2	-3.0	99259.9	49
908	13.0	54.0	2730	310.0	313.3	8.7	13.0	13.4	11.0	-3.0	99259.8	49
909	12.3	51.7	2712	310.0	313.3	7.7	12.9	12.7	10.5	-3.0	99259.5	49
910	12.6	53.3	2727	310.0	313.3	7.0	12.9	13.0	11.6	-3.1	99259.3	50
911	11.7	52.0	2788	310.0	313.3	7.7	13.2	12.1	10.5	-3.1	99259.3	50
912	12.4	51.9	2797	310.0	313.3	8.1	13.3	12.8	10.3	-3.1	99259.4	50
913	12.7	51.0	2718	310.0	313.3	6.5	12.9	13.1	9.4	-3.1	99259.4	50
914	12.3	52.0	2736	310.0	313.3	5.7	13.0	12.7	9.9	-3.1	99259.4	50
915	12.9	51.9	2854	310.0	313.3	7.8	13.5	13.4	10.4	-3.1	99272.7	50
916	11.7	52.8	2793	310.0	313.3	7.7	13.2	12.1	10.0	-3.1	99273.0	50
917	11.9	52.6	2769	310.0	313.3	7.5	13.1	12.3	9.9	-3.1	99273.2	50
918	11.7	51.9	2795	310.0	313.3	7.9	13.2	12.1	11.5	-3.1	99273.2	50
919	12.5	52.4	2777	310.0	313.3	7.9	13.1	13.0	11.1	-3.1	99272.8	50
920	11.6	52.5	2732	310.0	313.3	7.1	12.9	12.0	9.7	-3.1	99272.5	50
921	11.5	51.9	2729	310.0	313.3	6.3	12.9	11.9	10.6	-3.1	99272.7	49
922	11.6	53.3	2768	310.0	313.3	6.4	13.1	12.0	9.5	-3.1	99273.2	49
923	10.9	53.0	2737	310.0	313.3	5.6	13.0	11.3	8.7	-3.1	99273.4	49
924	11.7	53.7	2800	310.0	313.3	6.1	13.3	12.1	9.3	-3.1	99273.4	49
925	12.3	53.2	2865	310.0	313.3	7.7	13.6	12.7	10.3	-3.1	99273.4	49
926	12.0	52.2	2839	310.0	313.2	8.9	13.4	12.4	9.2	-3.1	99273.3	49
927	11.7	52.9	2696	310.0	310.8	6.8	12.8	12.1	9.3	-3.1	99273.3	49
928	12.4	52.6	2846	310.0	310.6	8.6	13.5	12.8	10.1	-3.1	99273.3	49
929	12.2	53.2	2793	310.0	310.6	8.7	13.2	12.6	10.1	-3.1	99273.2	49
930	12.4	51.5	2742	310.0	308.5	8.2	13.0	12.8	10.5	-3.1	99273.4	49
931	11.3	54.5	2738	310.0	308.0	7.6	13.0	11.7	9.5	-3.1	99273.2	49
932	12.8	51.4	2763	310.0	308.0	7.5	13.1	13.3	9.8	-3.1	99272.4	49
933	12.3	53.1	2746	310.0	308.0	7.0	13.0	12.7	9.5	-3.1	99260.5	50
934	10.8	53.8	2759	310.0	308.0	6.9	13.1	11.1	8.5	-3.1	99259.0	50
935	11.7	54.6	2720	310.0	308.0	5.7	12.9	12.1	8.0	-3.1	99259.4	50
936	11.7	53.6	2771	310.0	308.0	5.9	13.1	12.1	8.6	-3.1	99259.5	50
937	11.5	52.0	2748	310.0	308.0	5.4	13.0	11.9	8.5	-3.1	99259.9	50
938	11.1	52.8	2697	310.0	308.0	3.3	12.8	11.4	9.9	-3.1	99261.3	50
939	11.5	53.2	2788	310.0	308.0	4.1	13.2	11.9	8.6	-3.1	99273.5	51
940	11.7	53.7	2738	310.0	308.0	3.0	12.9	12.1	9.3	-3.1	99273.6	51
941	11.2	52.2	2702	310.0	308.0	1.3	12.8	11.6	10.1	-3.1	99273.6	51
942			2750	310.0	308.0	1.4	13.1	10.2	10.5	-3.1	99273.9	51
943	11.2	53.0	2799	310.0	308.0	2.0	13.2	11.5	9.4	-3.1	99273.5	51
944	10.5	52.2	2776	310.0	308.0	1.8	13.1	10.9	8.0	-3.1	99273.1	51
945	9.7	53.3	2381	310.0	308.0	-0.1	12.9	9.8	8.1	-3.1	99273.4	51
946	9.4	53.8	2239	310.0	305.9	-0.7	13.0	9.4	8.0	-3.1	99273.6	51
947	9.1	53.5	2115	310.0	305.4	-1.0	13.1	9.6	9.0	-3.1	99273.6	51
948	9.9	53.0	2485	310.0	305.4	-0.2	13.1	9.3	8.6	-3.1	99273.5	51
949	10.9	53.0	2637	310.0	305.4	-0.4	13.1	11.2	7.4	-3.1	99273.6	51
950	9.8	52.6	2446	310.0	305.4	-0.9	13.0	10.8	8.6	-3.1	99273.5	51
951	9.4	53.4	2250	310.0	305.4	-1.0	13.1	10.1	9.6	-3.1	99273.5	51
952	9.1	52.7	2083	310.0	305.4	-1.1	13.1	10.7	8.6	-3.1	99273.6	51
953			2604	310.0	305.4	1.3	13.4	9.8	10.0	-3.1	99273.1	51
954	10.8	52.5	2943	310.0	305.4	5.4	13.9	11.2	9.0	-3.1	99272.8	51
955	11.7	52.3	2882	310.0	305.4	6.4	13.6	12.1	7.6	-3.1	99273.1	51
956	12.8	54.2	2977	310.0	305.4	9.3	14.1	13.2	8.8	-3.1	99273.1	51
957	14.0	56.4	2950	310.0	305.3	11.3	13.9	14.4	9.0	-3.1	99273.6	52
958	15.4	55.1	2927	310.0	305.4	13.1	13.9	15.9	8.3	-3.1	99273.6	52
959	16.4	54.2	2782	310.0	305.5	12.9	13.2	16.9	10.4	-3.1	99273.7	52
960	14.5	53.2	2768	310.0	308.3	12.7	13.2	15.0	10.9	-3.1	99273.2	52
961	13.3	53.7	2694	310.0	308.9	11.8	12.8	13.8	9.6	-3.1	99272.8	52
962	13.4	56.5	2646	310.0	311.0	10.0	12.6	13.9	12.6	-3.0	99272.4	52
963	12.0	54.5	2678	310.0	311.9	8.9	12.7	12.4	10.3	-3.0	99272.7	53
964	13.2	54.2	2762	310.0	311.9	9.2	13.1	13.7	8.4	-3.0	99272.6	53
965	11.7	51.2	2737	310.0	311.9	8.8	13.0	12.1	10.0	-3.0	99272.7	53
966	11.7	51.1	2655	310.0	311.9	6.2	12.6	12.0	9.6	-3.0	99272.7	53
967	11.3	51.9	2753	310.0	311.9	6.2	13.1	11.7	9.2	-3.0	99272.5	53
968	11.2	52.4	2765	310.0	311.9	6.2	13.1	11.6	9.7	-3.0	99274.0	51

***Blank data denotes values that were omitted in the analysis due to an extraneous event during recording

Data Point #	Standardized Wind Speed	LAeq	Turbine Power Output (kW)	Reference Yaw Angle (°)	Yaw Angle (°)	Pitch Angle (°)	Rotor RPM	Nacelle Anemometer Wind Speed (m/s)	10m Anemometer Wind Speed (m/s)	Air Temperature (-C)	Pressure (kPa)	Relative Humidity (%)
969	11.8	52.8	2834	310.0	311.9	7.3	13.4	12.2	11.5	-3.0	99272.7	50
970	12.9	52.5	2850	310.0	311.9	8.6	13.5	13.3	9.9	-3.0	99272.9	50
971	12.1	51.3	2741	310.0	311.9	7.5	13.0	12.5	10.3	-3.0	99273.3	50
972	11.4	52.0	2753	310.0	311.8	7.2	13.0	11.8	10.3	-3.0	99273.4	50
973	11.9	52.6	2703	310.0	311.8	5.7	12.8	12.3	10.1	-3.0	99272.9	50
974	12.2	52.0	2734	310.0	311.8	4.9	12.9	12.6	8.9	-3.0	99274.2	50
975	11.6	51.5	2800	310.0	311.8	5.7	13.2	12.0	7.3	-3.0	99273.0	50
976	12.2	52.0	2834	310.0	311.8	6.6	13.4	12.7	8.0	-3.0	99273.6	50
977	11.9	52.2	2797	310.0	311.9	6.9	13.2	12.3	9.6	-3.0	99273.9	50
978	11.6	51.6	2764	310.0	311.9	6.4	13.1	12.0	9.8	-3.0	99274.0	50
979	11.8	53.1	2747	310.0	311.9	5.8	13.0	12.2	8.4	-3.0	99273.9	50
980	12.3	52.4	2770	310.0	311.8	5.7	13.1	12.7	8.9	-3.0	99275.6	50
981	11.4	53.5	2767	310.0	311.8	5.6	13.1	11.8	8.2	-3.0	99273.9	50
982	11.4	51.9	2586	310.0	313.4	3.5	12.8	11.8	11.9	-2.9	99313.9	51
983	9.8	52.2	2440	310.0	313.4	2.4	12.9	10.5	11.0	-2.9	99314.2	51
984	10.0	52.4	2517	310.0	313.4	2.0	13.0	10.3	10.9	-2.9	99314.1	51
985	11.2	52.7	2819	310.0	313.4	3.1	13.3	11.6	11.2	-2.9	99313.2	49
986	11.5	52.1	2851	310.0	313.4	4.5	13.4	11.9	11.6	-2.9	99313.1	49
987	11.1	52.7	2805	310.0	313.4	4.4	13.2	11.5	11.1	-2.9	99313.0	49
988	10.9	51.9	2815	310.0	313.4	5.0	13.3	11.2	9.3	-2.9	99312.9	49
989			2785	310.0	313.4	4.8	13.1	9.8	9.7	-2.9	99313.1	49
990	12.0	52.0	2845	310.0	313.4	6.0	13.5	12.4	10.5	-2.9	99313.4	49
991	11.4	51.7	2864	310.0	313.4	7.6	13.5	11.8	11.2	-3.0	99314.0	49
992	12.4	51.2	2759	310.0	313.4	6.6	13.0	12.8	10.2	-3.0	99314.0	49
993	11.3	52.0	2738	310.0	315.4	6.0	13.0	11.6	8.3	-3.0	99314.9	49
994	10.8	53.4	2770	310.0	316.3	6.0	13.1	11.1	7.7	-3.0	99315.3	49
995	11.4	51.5	2749	310.0	316.3	5.3	13.0	11.8	8.6	-3.0	99315.3	49
996	11.2	52.3	2790	310.0	316.3	5.8	13.2	11.6	9.0	-3.0	99314.4	49
997	11.6	52.1	2785	310.0	316.3	5.7	13.2	12.0	9.8	-3.0	99314.5	51
998	12.0	52.3	2849	310.0	316.3	7.2	13.5	12.4	8.4	-3.0	99315.0	51
999	11.6	51.3	2811	310.0	316.3	7.6	13.3	12.0	9.0	-3.0	99315.4	51
1000	11.5	51.4	2721	310.0	316.3	6.2	12.9	11.8	10.2	-3.0	99315.2	51
1001	10.8	51.8	2683	310.0	316.3	4.1	12.7	11.1	9.3	-3.0	99315.2	51
1002	10.9	53.2	2693	310.0	316.3	2.7	12.8	11.3	9.7	-3.0	99315.1	51
1003	11.7	53.4	2783	310.0	316.3	3.4	13.2	12.1	9.2	-3.0	99315.5	51
1004	11.8	52.5	2824	310.0	316.3	4.4	13.3	12.2	8.7	-3.0	99315.3	51
1005	12.1	51.9	2798	310.0	316.3	4.7	13.2	12.5	9.3	-3.0	99315.2	51
1006	11.1	51.5	2738	310.0	316.3	3.5	12.9	11.4	10.2	-3.0	99315.2	51
1007	10.2	51.6	2565	310.0	316.3	1.6	12.8	11.8	8.5	-3.0	99314.7	51
1008	9.8	51.8	2417	310.0	316.3	1.1	13.0	9.7	8.7	-3.0	99315.1	51
1009	9.8	51.9	2410	310.0	316.3	0.6	13.1	9.9	10.3	-3.0	99315.2	52
1010	9.7	52.8	2372	310.0	316.3	0.1	13.1	9.4	10.7	-3.0	99315.5	52
1011			2656	310.0	316.3	0.3	13.1	10.5	10.4	-3.0	99315.5	52
1012	10.6	52.4	2765	310.0	316.3	0.4	13.2	11.0	10.0	-3.0	99315.4	52
1013	10.0	52.5	2538	310.0	316.3	-0.7	12.9	9.8	10.4	-3.0	99315.3	52
1014	10.0	53.0	2539	310.0	316.3	-0.3	13.1	10.5	10.6	-3.0	99315.2	52
1015			2785	310.0	316.3	0.4	13.2	10.3	10.8	-2.9	99314.8	52
1016	10.0	53.8	2535	310.0	316.3	-0.8	12.9	11.0	10.6	-2.9	99314.2	52
1017	9.9	54.4	2493	310.0	316.3	-0.3	13.1	9.8	9.6	-2.9	99314.0	52
1018	11.9	53.5	2964	310.0	316.3	4.6	14.0	12.3	8.9	-2.9	99314.3	52
1019	12.4	54.1	2955	310.0	316.3	7.0	13.9	12.8	9.0	-2.9	99314.8	52
1020	11.3	54.2	2796	310.0	316.3	6.2	13.2	11.7	10.4	-2.9	99314.9	52
1021	9.2	52.2	2140	310.0	316.3	2.9	12.7	9.1	10.2	-3.0	99314.8	51
1022	12.5	53.0	2809	310.0	316.3	4.1	13.3	12.9	8.4	-3.0	99314.2	51
1023	11.9	54.0	2848	310.0	316.3	5.6	13.5	12.3	9.2	-3.0	99314.8	51
1024	12.4	52.8	2775	310.0	316.3	5.0	13.1	12.9	8.2	-3.0	99314.7	51
1025	11.3	52.5	2756	310.0	316.3	4.5	13.0	11.7	10.0	-3.0	99314.9	51
1026			2719	310.0	316.3	2.8	12.9	10.1	9.6	-3.0	99314.5	52
1027	10.5	51.7	2764	310.0	316.3	3.3	13.1	10.9	10.0	-3.0	99314.0	52
1028	10.2	52.3	2577	310.0	316.3	1.6	12.9	9.8	9.8	-3.0	99313.7	52
1029	9.9	53.2	2474	310.0	316.3	1.0	13.0	10.3	11.6	-3.0	99313.7	52
1030	10.7	52.7	2779	310.0	316.3	2.1	13.3	11.0	10.8	-3.0	99313.8	52
1031	11.6	53.6	2856	310.0	316.3	4.0	13.5	12.0	9.4	-3.0	99314.4	52
1032	10.5	52.5	2745	310.0	316.3	2.3	12.9	10.9	8.6	-3.0	99315.1	52
1033	10.4	52.7	2765	310.0	316.3	2.0	13.1	10.8	9.4	-3.0	99315.2	52
1034	10.8	53.7	2774	310.0	316.3	2.0	13.1	11.2	8.3	-3.0	99315.1	52
1035	10.5	52.3	2778	310.0	316.3	2.1	13.1	10.8	9.2	-3.0	99314.5	52
1036			2636	310.0	316.3	0.6	13.0	10.6	10.9	-3.0	99314.1	52
1037	11.1	52.9	2905	310.0	316.3	4.0	13.8	11.4	11.2	-3.0	99314.0	52
1038	11.4	54.1	2914	310.0	316.3	6.3	13.7	11.8	11.1	-3.0	99324.4	51
1039	11.1	54.7	2827	310.0	316.3	6.5	13.4	11.5	11.6	-3.0	99327.5	50
1040	11.1	52.2	2715	310.0	316.3	4.4	12.8	11.5	11.6	-3.0	99327.5	50
1041	10.9	54.9	2694	310.0	316.3	2.3	12.8	11.3	10.2	-3.0	99327.7	50
1042	10.6	52.2	2745	310.0	316.3	2.1	13.0	10.9	9.2	-3.0	99327.7	50
1043			2712	310.0	316.3	1.2	13.0	10.4	10.2	-3.0	99327.5	50
1044			2868	310.0	316.3	3.5	13.6	10.6	9.8	-3.0	99327.6	49
1045	11.7	54.3	2939	310.0	316.3	6.8	13.9	12.0	10.2	-3.0	99327.6	48
1046	10.4	51.6	2803	310.0	316.3	6.3	13.3	10.8	11.7	-3.0	99327.6	48
1047			2718	310.0	316.3	4.7	12.9	10.5	10.4	-3.0	99327.3	48
1048			2663	310.0	316.3	2.5	12.7	10.5	9.1	-3.0	99326.6	48
1049	11.4	52.9	2694	310.0	316.3	1.4	12.9	11.8	9.6	-3.0	99327.3	48
1050	11.6	53.0	2769	310.0	316.3	1.8	13.1	12.0	10.2	-3.0	99327.6	49
1051			2808	310.0	316.3	2.7	13.3	10.5	9.8	-3.1	99327.0	49
1052	10.9	53.2	2787	310.0	316.4	2.9	13.2	11.2	9.2	-3.1	99326.4	49
1053			2608	310.0	316.3	1.3	12.9	9.9	9.9	-3.1	99326.6	49
1054	10.4	52.6	2763	310.0	316.4	2.0	13.2	10.8	11.4	-3.1	99326.5	49
1055	10.9	53.0	2834	310.0	316.3	3.4	13.4	11.2	10.9	-3.1	99327.3	49
1056	10.6	55.1	2779	310.0	316.3	3.2	13.2	11.0	9.6	-3.1	99338.0	49

Table E.01 Measurement data - Turbine ON

Project: North Kent Wind Farm - Turbine T36 - IEC 61400-11 Measurement
Report ID:17283.01.T36.RP2

Created on: 2/22/2019

***Blank data denotes values that were omitted in the analysis due to an extraneous event during recording

Data Point #	Standardized Wind Speed	LAeq	Turbine Power Output (kW)	Reference Yaw Angle (°)	Yaw Angle (°)	Pitch Angle (°)	Rotor RPM	Nacelle Anemometer Wind Speed (m/s)	10m Anemometer Wind Speed (m/s)	Air Temperature (-C)	Pressure (kPa)	Relative Humidity (%)
1057	10.3	52.6	2735	310.0	316.3	1.9	13.0	10.6	8.5	-3.1	99340.9	49
1058			2749	310.0	315.8	1.8	13.1	10.5	7.7	-3.1	99339.6	49

***Blank data denotes values that were omitted in the analysis due to an extraneous event during recording

Data Point #	Standardized Wind Speed	LAeq	Turbine Power Output (kW)	Reference Yaw Angle (°)	Yaw Angle (°)	Pitch Angle (°)	Rotor RPM	Nacelle Anemometer Wind Speed (m/s)	10m Anemometer Wind Speed (m/s)	Air Temperature (-C)	Pressure (kPa)	Relative Humidity (%)
1145												
1146												

Table E.02 Measurement data - Background

Project: North Kent Wind Farm - Turbine T36 - IEC 61400-11 Measurement

Report ID: 17238.01.T36.RP2

Created on: 2/22/2019

***Blank data denotes values that were omitted in the analysis due to an extraneous event during recording

Data Point #	Standardized Wind Speed	LAeq	Rotor RPM	10m Anemometer Wind Speed (m/s)	Air Temperature (-C)	Pressure (kPa)	Relative Humidity (%)
1	8.8	36.5	0.4	7.3	-1	99184.1	64
2	9.3	37.2	0.4	7.8	-1	99192.7	64
3	8.6	37.5	0.4	7.1	-1	99196.7	64
4	8.7	36.2	0.4	7.2	-1	99196.7	64
5	7.6	38.8	0.4	6.3	-1	99196.9	64
6	8.8	37.6	0.3	7.4	-1	99196.9	64
7	8.0	38.1	0.4	6.7	-1	99197.0	64
8	7.2	38.7	0.4	6.0	-1	99196.8	65
9	8.7	39.9	0.5	7.3	-1	99197.0	65
10	9.5	40.2	0.5	7.9	-1	99196.9	65
11	10.5	38.1	0.5	8.8	-1	99196.9	65
12	11.4	41.1	0.5	9.5	-1	99196.7	65
13	10.7	41.6	0.4	8.9	-1	99197.0	65
14	10.5	40.9	0.4	8.8	-1	99196.9	65
15	10.3	37.2	0.2	8.6	-1	99196.8	64
16	9.6	39.0	0.3	8.0	-1	99196.9	64
17	9.3	38.6	0.4	7.8	-1	99196.9	64
18	8.5	38.5	0.3	7.1	-1	99196.9	64
19	9.2	37.5	0.4	7.7	-1	99197.1	64
20	8.9	36.5	0.4	7.4	-1	99197.0	65
21	9.2	36.8	0.4	7.7	-1	99196.9	65
22	8.3	40.5	0.4	6.9	-1	99197.0	65
23	7.6	39.0	0.4	6.3	-1	99197.0	65
24	7.5	38.8	0.4	6.2	-1	99197.0	65
25	6.2	36.9	0.4	5.2	-1	99197.2	65
26	8.2	37.5	0.4	6.8	-1	99196.9	65
27	10.1	38.6	0.4	8.4	-1	99197.2	65
28	10.0	39.6	0.4	8.4	-1	99196.9	65
29	9.8	38.7	0.5	8.2	-1	99197.2	65
30	8.5	41.9	0.4	7.1	-1	99197.1	65
31	9.3	39.4	0.5	7.8	-1	99197.2	65
32	9.2	42.2	0.5	7.7	-1	99197.1	65
33	8.0	40.0	0.5	6.6	-1	99196.9	64
34	8.7	40.5	0.5	7.2	-1	99197.2	64
35	8.8	44.6	0.3	7.4	-1	99197.4	64
36	8.2	42.2	0.2	6.8	-1	99197.4	64
37	8.8	38.8	0.3	7.4	-1	99197.4	64
38	7.8	38.5	0.4	6.5	-1	99197.2	64
39	7.7	37.2	0.4	6.4	-1	99197.5	65
40	7.3	37.6	0.4	6.1	-1	99197.5	65
41	7.3	38.0	0.4	6.1	-1	99197.1	65
42	9.0	37.1	0.4	7.5	-1	99197.2	65
43	8.6	37.2	0.4	7.2	-1	99197.1	65
44	7.4	38.4	0.4	6.2	-1	99197.2	65
45	7.7	38.3	0.4	6.5	-1	99197.5	65
46	7.8	38.2	0.4	6.5	-1	99197.5	65
47	7.4	38.0	0.3	6.2	-1	99197.1	65
48	6.6	37.1	0.3	5.5	-1	99197.4	65
49	7.0	39.1	0.4	5.8	-1	99197.2	65
50	6.4	37.5	0.4	5.3	-1	99197.4	65
51	6.9	36.4	0.4	5.8	-1	99197.4	65
52	7.4	37.5	0.3	6.2	-1	99198.0	65
53	7.8	37.9	0.2	6.5	-1	99197.7	65
54	7.0	37.9	0.3	5.8	-1	99197.6	65
55	7.7	35.8	0.5	6.4	-1	99197.8	65
56	7.6	36.0	0.4	6.3	-1	99197.9	66
57	8.8	36.0	0.4	7.4	-1	99197.8	66
58	10.4	36.5	0.3	8.7	-1	99197.9	66
59	10.0	34.9	0.4	8.4	-1	99197.8	66
60	10.4	40.8	0.4	8.7	-1	99197.9	66
61	9.7	40.6	0.4	8.1	-1	99197.5	66
62	8.4	35.4	0.4	7.1	-1	99197.3	65
63	9.6	34.8	0.3	8.0	-1	99197.5	64
64	9.9	35.1	0.4	8.2	-1	99197.5	64
65	10.5	37.5	0.5	8.7	-1	99197.9	64
66	10.6	36.5	0.3	8.9	-1	99197.4	64
67	10.4	35.6	0.3	8.7	-1	99197.6	64
68	9.3	35.1	0.3	7.8	-1	99198.3	64
69	9.0	35.6	0.2	7.5	-1	99197.9	64
70	9.5	37.7	0.3	7.9	-1	99197.9	64
71	9.5	38.4	0.3	7.9	-1	99197.9	64
72	8.6	36.6	0.3	7.1	-1	99198.3	64
73	8.0	35.7	0.3	6.7	-1	99198.1	64
74	7.6	35.4	0.3	6.3	-1	99198.3	65
75	6.9	37.7	0.2	5.8	-1	99198.1	65
76	7.2	38.6	0.2	6.0	-1	99198.1	65
77	6.7	36.2	0.3	5.6	-1	99198.1	65
78	6.6	37.1	0.4	5.5	-1	99198.3	65
79	8.9	37.4	0.4	7.4	-1	99198.3	65
80	9.9	38.4	0.4	8.3	-1	99198.5	65
81	10.4	37.4	0.3	8.7	-1	99198.1	65
82	9.9	38.3	0.3	8.3	-1	99198.4	65
83	9.2	39.0	0.5	7.7	-1	99198.7	65

***Blank data denotes values that were omitted in the analysis due to an extraneous event during recording

Data Point #	Standardized Wind Speed	LAeq	Rotor RPM	10m Anemometer Wind Speed (m/s)	Air Temperature (-C)	Pressure (kPa)	Relative Humidity (%)
84	8.7	37.1	0.5	7.3	-1	99198.6	65
85	8.2	35.3	0.4	6.8	-1	99198.6	65
86	9.4	36.7	0.5	7.8	-1	99198.8	65
87	9.4	38.5	0.4	7.9	-1	99198.4	65
88	7.9	37.9	0.3	6.6	-1	99198.7	65
89	8.0	39.9	0.4	6.7	-1	99198.6	65
90	8.4	40.9	0.3	7.0	-1	99198.3	65
91	7.2	40.0	0.4	6.0	-1	99198.5	65
92	7.0	37.1	0.4	5.8	-1	99198.6	65
93	8.0	37.6	0.3	6.6	-1	99198.6	66
94	9.3	38.6	0.4	7.7	-1	99198.6	66
95	9.2	38.7	0.4	7.6	-1	99198.9	66
96	8.1	38.4	0.4	6.8	-1	99198.9	66
97	7.6	40.4	0.3	6.4	-1	99198.8	66
98	7.3	39.8	0.2	6.1	-1	99198.7	65
99	6.9	38.2	0.2	5.8	-1	99198.7	65
100	7.8	38.3	0.3	6.5	-1	99198.6	65
101	9.6	38.8	0.3	8.0	-1	99198.7	65
102	10.1	38.0	0.4	8.4	-1	99199.1	65
103	9.9	37.5	0.4	8.2	-1	99198.7	65
104	10.2	35.5	0.4	8.5	-1	99199.0	65
105	10.2	38.0	0.3	8.5	-1	99199.1	65
106	10.4	39.8	0.4	8.7	-1	99198.9	65
107	9.8	37.7	0.4	8.2	-1	99199.2	65
108	8.9	37.5	0.4	7.5	-1	99199.3	65
109	9.6	37.9	0.4	8.0	-1	99199.3	65
110	8.2	39.4	0.4	6.9	-1	99199.1	65
111	8.3	37.4	0.3	7.0	-1	99199.2	65
112	7.8	37.4	0.4	6.5	-1	99199.3	65
113	8.0	36.7	0.4	6.7	-1	99199.4	65
114	9.4	37.1	0.4	7.8	-1	99199.5	65
115	9.1	38.7	0.3	7.6	-1	99199.0	65
116	9.0	40.1	0.4	7.6	-1	99208.0	65
117	9.4	39.2	0.3	7.9	-1	99212.7	65
118	9.0	36.7	0.4	7.5	-1	99212.6	65
119	9.3	36.5	0.4	7.8	-1	99212.2	65
120	10.2	33.1	0.3	8.6	-1	99212.3	65
121	10.2	32.8	0.3	8.5	-1	99212.4	65
122	10.7	33.4	0.3	9.0	-1	99205.1	65
123	9.4	36.8	0.3	7.8	-1	99199.6	65
124	7.4	37.8	0.4	6.2	-1	99199.2	65
125	9.2	38.8	0.3	7.7	-1	99199.4	65
126	8.6	40.2	0.3	7.2	-1	99199.5	65
127	7.5	37.7	0.3	6.3	-1	99199.2	65
128	7.9	36.4	0.5	6.6	-1	99201.9	64
129	7.0	35.9	0.4	5.8	-1	99199.5	64
130	7.4	38.7	0.3	6.2	-1	99199.5	64
131	7.0	37.3	0.4	5.9	-1	99199.5	64
132	7.5	35.6	0.3	6.3	-1	99199.4	64
133	8.6	35.0	0.3	7.2	-1	99199.8	64
134	7.5	36.5	0.4	6.3	-1	99208.3	65
135	8.1	38.4	0.5	6.8	-1	99212.6	65
136	8.9	37.2	0.4	7.4	-1	99212.8	65
137	10.5	37.5	0.3	8.8	-1	99212.4	65
138	10.6	38.0	0.4	8.8	-1	99212.8	65
139	9.7	40.7	0.3	8.1	-1	99212.8	65
140	8.9	39.8	0.3	7.4	-1	99212.7	65
141	8.9	38.2	0.3	7.4	-1	99212.9	65
142	8.6	37.4	0.4	7.2	-1	99212.8	65
143	7.5	36.6	0.4	6.3	-1	99212.9	65
144	7.8	38.0	0.3	6.5	-1	99212.8	65
145	7.5	36.0	0.3	6.3	-1	99212.7	65
146	7.5	35.3	0.3	6.3	-1	99213.2	66
147	6.8	34.8	0.4	5.7	-1	99212.9	66
148	7.6	35.2	0.2	6.3	-1	99212.9	66
149	7.9	36.6	0.3	6.6	-1	99213.1	66
150	8.8	36.1	0.5	7.4	-1	99212.9	66
151	7.4	37.7	0.4	6.1	-1	99213.0	66
152	7.5	37.5	0.2	6.2	-1	99213.2	65
153	7.7	35.7	0.3	6.5	-1	99213.2	65
154	7.6	35.3	0.4	6.3	-1	99213.1	65
155	8.2	36.2	0.4	6.8	-1	99213.1	65
156	7.9	38.6	0.3	6.6	-1	99213.4	65
157	6.4	39.2	0.4	5.3	-1	99213.3	65
158	6.5	40.1	0.4	5.4	-1	99213.3	66
159	7.7	37.8	0.4	6.4	-1	99213.2	66
160	7.9	37.6	0.4	6.6	-1	99213.4	66
161	7.6	37.3	0.3	6.3	-1	99213.4	66
162	8.2	37.8	0.3	6.8	-1	99213.2	66
163	8.6	36.7	0.4	7.2	-1	99213.3	66
164	9.8	36.3	0.3	8.2	-1	99213.3	66
165	10.0	36.4	0.5	8.3	-1	99213.2	65
166	9.2	35.3	0.4	7.7	-1	99213.2	65

***Blank data denotes values that were omitted in the analysis due to an extraneous event during recording

Data Point #	Standardized Wind Speed	LAeq	Rotor RPM	10m Anemometer Wind Speed (m/s)	Air Temperature (-C)	Pressure (kPa)	Relative Humidity (%)
167	8.7	37.7	0.3	7.3	-1	99213.6	65
168	7.3	35.5	0.4	6.1	-1	99213.6	65
169	7.0	37.3	0.4	5.9	-1	99213.6	65
170	7.8	38.1	0.2	6.5	-1	99213.7	66
171	8.8	38.8	0.2	7.3	-1	99213.4	66
172	9.2	36.5	0.2	7.7	-1	99213.7	66
173	8.4	40.7	0.2	7.0	-1	99213.4	66
174	8.1	36.4	0.3	6.8	-1	99213.6	66
175	7.9	34.3	0.4	6.6	-1	99213.0	66
176	8.2	34.7	0.4	6.8	-1	99213.1	66
177	8.6	35.9	0.3	7.2	-1	99213.4	66
178	8.0	38.9	0.2	6.7	-1	99213.6	66
179	8.8	39.0	0.3	7.4	-1	99213.6	66
180	9.0	39.4	0.4	7.5	-1	99213.4	66
181	9.5	36.6	0.4	7.9	-1	99213.5	66
182	7.4	35.1	0.5	6.2	-1	99213.5	65
183	6.6	37.2	0.4	5.5	-1	99212.9	65
184	7.2	38.6	0.4	6.0	-1	99212.9	65
185	8.2	40.9	0.4	6.8	-1	99213.2	65
186	8.3	43.6	0.4	7.0	-1	99213.1	65
187	10.1	40.4	0.3	8.5	-1	99213.0	65
188	11.1	37.6	0.4	9.3	-1	99212.7	65
189	9.9	39.1	0.3	8.3	-1	99213.0	65
190	10.2	38.0	0.3	8.5	-1	99212.9	65
191	10.8	39.0	0.4	9.0	-1	99213.0	65
192	10.4	38.8	0.4	8.7	-1	99212.8	65
193	11.0	38.9	0.4	9.2	-1	99212.8	65
194	10.5	38.6	0.4	8.8	-1	99213.1	65
195	11.3	37.6	0.3	9.4	-1	99213.2	64
196	10.9	37.4	0.3	9.1	-1	99213.1	64
197	10.6	37.4	0.4	8.8	-1	99213.1	64
198	7.7	40.0	0.7	6.4	-1	99252.9	65
199	6.8	39.2	0.3	5.7	-1	99261.5	65
200	5.9	43.1	0.3	4.9	-1	99266.1	65
201	7.3	40.2	0.4	6.1	-1	99266.2	65
202	6.5	41.2	0.4	5.4	-1	99266.1	65
203	6.1	40.9	0.4	5.1	-1	99266.2	65
204	5.7	40.6	0.3	4.8	-1	99265.9	65
205	6.7	39.7	0.3	5.6	-1	99266.1	66
206	7.8	36.9	0.4	6.5	-1	99266.0	67
207	7.5	38.6	0.5	6.3	-1	99265.9	67
208	7.8	39.5	0.4	6.5	-1	99266.0	67
209	7.7	45.6	0.4	6.4	-1	99266.0	67
210	7.8	46.0	0.3	6.5	-1	99265.9	67
211	8.1	40.2	0.3	6.8	-1	99274.9	66
212	8.2	40.1	0.3	6.9	-1	99280.0	66
213	8.0	37.7	0.3	6.7	-1	99279.8	66
214	7.5	37.8	0.4	6.3	-1	99279.9	66
215	9.5	38.5	0.4	7.9	-1	99279.9	66
216	9.0	41.4	0.4	7.5	-1	99280.1	66
217	9.9	42.8	0.3	8.3	-1	99271.2	65
218	10.5	40.0	0.3	8.7	-1	99266.3	65
219	9.4	47.1	0.3	7.9	-1	99266.4	65
220	9.7	42.1	0.3	8.1	-1	99266.6	65
221	8.2	40.3	0.3	6.8	-1	99266.4	65
222	8.0	40.0	0.4	6.7	-1	99266.4	65
223	7.3	41.4	0.3	6.1	-1	99266.3	65
224	6.3	40.1	0.3	5.2	-1	99266.3	65
225	6.4	38.4	0.3	5.3	-1	99266.3	65
226	7.4	39.4	0.3	6.2	-1	99266.7	65
227	8.2	37.1	0.3	6.9	-1	99266.4	65
228	7.2	37.5	0.4	6.0	-1	99266.4	65
229	7.3	36.7	0.4	6.1	-1	99266.5	66
230	7.2	38.1	0.4	6.0	-1	99266.5	66
231	6.7	40.1	0.4	5.6	-1	99266.4	66
232	7.1	43.1	0.3	5.9	-1	99266.5	66
233	7.2	42.6	0.3	6.0	-1	99266.7	66
234	7.5	41.3	0.4	6.3	-1	99266.5	66
235	7.8	40.1	0.4	6.5	-1	99267.9	66
236	9.2	39.0	0.3	7.7	-1	99266.4	66
237	9.1	38.7	0.3	7.6	-1	99266.5	66
238	8.0	39.8	0.4	6.7	-1	99266.5	66
239	9.2	39.0	0.4	7.7	-1	99266.5	66
240	9.6	41.4	0.3	8.0	-1	99266.5	66
241	8.8	39.3	0.3	7.3	-1	99267.8	66
242	10.1	37.7	0.4	8.4	-1	99266.7	65
243	6.3	41.1	0.3	5.2	-1	99279.8	66
244	7.3	39.6	0.4	6.1	-1	99279.7	66
245	7.9	39.4	0.4	6.6	-1	99279.7	66
246	8.1	37.9	0.4	6.8	-1	99279.6	66
247	9.0	39.6	0.4	7.5	-1	99279.6	66
248	8.6	40.9	0.4	7.2	-1	99279.8	66
249	9.4	37.9	0.4	7.8	-1	99279.7	66

Table E.02 Measurement data - Background

Project: North Kent Wind Farm - Turbine T36 - IEC 61400-11 Measurement

Report ID: 17238.01.T36.RP2

Created on: 2/22/2019

***Blank data denotes values that were omitted in the analysis due to an extraneous event during recording

Data Point #	Standardized Wind Speed	LAeq	Rotor RPM	10m Anemometer Wind Speed (m/s)	Air Temperature (°C)	Pressure (kPa)	Relative Humidity (%)
250	8.2	36.8	0.3	6.9	-1	99279.7	66
251	8.8	38.1	0.3	7.3	-1	99279.8	66
252	9.0	36.3	0.4	7.5	-1	99279.9	66
253	9.7	36.4	0.4	8.1	-1	99280.0	65
254	8.9	36.6	0.4	7.4	-1	99279.9	65
255	9.2	36.9	0.4	7.7	-1	99279.9	65
256	10.2	38.6	0.4	8.5	-1	99280.0	65
257	10.3	41.5	0.4	8.6	-1	99280.0	65
258	8.4	38.7	0.5	7.0	-1	99279.9	65
259	8.2	39.6	0.6	6.9	-1	99280.0	65
260	8.3	39.2	0.5	6.9	-1	99279.8	65
261	7.1	39.4	0.4	6.0	-1	99279.9	65
262	8.4	38.3	-0.2	7.1	-1	99279.9	65
263	7.6	35.8	-0.2	6.3	-1	99290.3	65
264	9.1	39.2	0.3	7.6	-1	99293.6	64
265	8.9	37.8	0.3	7.4	-1	99293.7	64
266	8.3	41.1	0.4	6.9	-1	99293.8	65
267	7.2	49.7	0.3	6.0	-1	99293.7	65
268	6.4	40.0	0.3	5.4	-1	99293.5	65
269	6.4	40.4	0.3	5.3	-1	99293.7	65
270	5.8	41.4	0.5	4.8	-1	99293.6	65
271	6.9	42.5	0.4	5.8	-1	99293.4	65
272	8.0	40.1	0.4	6.7	-1	99293.5	65
273	8.8	39.7	0.4	7.4	-1	99293.8	66
274	8.5	39.1	0.5	7.1	-1	99293.7	66
275	10.2	40.0	0.5	8.5	-1	99293.8	66
276	10.5	43.7	0.4	8.8	-1	99293.7	66
277	10.1	47.1	0.4	8.4	-1	99293.6	66
278	9.1	45.7	0.4	7.6	-1	99293.9	65
279	9.1	42.6	0.4	7.6	-1	99293.8	65
280	7.7	43.8	0.4	6.5	-1	99293.7	65
281	8.2	43.0	0.4	6.8	-1	99293.6	65
282	7.9	46.3	0.3	6.6	-1	99293.6	65
283	7.5	41.9	0.3	6.3	-1	99293.8	65
284	6.7	40.9	0.3	5.6	-1	99293.6	65
285	6.6	36.0	0.4	5.5	-1	99293.5	66
286	7.9	38.0	0.3	6.6	-1	99293.6	66
287	6.7	38.0	0.4	5.6	-1	99293.2	66
288	6.4	38.6	0.4	5.4	-1	99293.4	66
289	6.2	37.5	0.3	5.1	-1	99293.3	66
290	7.6	38.9	0.4	6.4	-1	99293.6	66
291	6.8	39.4	0.3	5.7	-1	99293.9	66
292	7.8	39.2	0.3	6.5	-1	99293.9	66
293	9.0	39.5	0.3	7.5	-1	99293.9	66
294	8.8	38.0	0.3	7.4	-1	99294.0	66
295	9.3	36.8	0.3	7.8	-1	99294.0	66
296	7.8	37.6	0.3	6.5	-1	99293.6	66
297	8.1	38.2	0.4	6.7	-1	99294.0	65
298	7.4	39.9	0.3	6.2	-1	99294.1	65
299	6.5	39.2	0.3	5.4	-1	99294.0	65
300	8.3	36.5	0.4	6.9	-1	99293.9	65
301	8.0	38.3	0.3	6.7	-1	99293.9	65
302	7.4	38.4	0.3	6.2	-1	99294.1	65
303	7.1	37.8	0.2	6.0	-1	99293.7	66
304	7.8	37.1	0.3	6.6	-1	99294.0	66
305	9.0	38.1	0.3	7.5	-1	99294.0	66
306	8.9	38.6	0.4	7.4	-1	99293.5	66
307	8.5	38.9	0.3	7.1	-1	99293.9	66
308	8.7	36.9	0.4	7.3	-1	99293.8	66
309	7.9	37.3	0.3	6.6	-1	99293.6	66
310	8.4	36.6	0.3	7.0	-1	99293.8	66
311	7.8	37.6	0.3	6.5	-1	99293.6	66
312	8.7	36.9	0.4	7.3	-1	99294.0	66
313	7.4	38.1	0.4	6.2	-1	99293.8	66
314	10.4	38.4	0.3	8.7	-1	99293.8	66
315	9.8	38.9	0.3	8.2	-1	99293.9	65
316	8.4	41.4	0.2	7.0	-1	99293.9	65
317	8.4	39.2	0.3	7.0	-1	99293.8	65
318	7.5	39.3	0.4	6.3	-1	99294.0	65
319	8.6	39.0	0.3	7.2	-1	99293.7	65
320	8.2	37.1	0.3	6.8	-1	99293.6	66
321	7.5	37.4	0.4	6.3	-1	99293.9	66
322	7.6	37.0	0.4	6.3	-1	99293.3	66
323	7.7	37.6	0.3	6.4	-1	99292.6	66
324	7.7	37.5	0.3	6.4	-1	99291.7	66
325	7.5	38.1	0.3	6.3	-1	99290.7	66
326	7.5	37.2	0.2	6.3	-1	99294.3	66
327	7.7	37.0	0.2	6.4	-1	99301.8	66
328	8.3	37.7	0.2	7.0	-1	99300.7	66
329	7.0	39.6	0.3	5.8	-1	99300.0	66
330	8.2	38.6	0.3	6.8	-1	99300.0	66
331	7.8	38.7	0.3	6.5	-1	99300.1	66
332	8.9	36.4	0.3	7.4	-3	99256.0	63

***Blank data denotes values that were omitted in the analysis due to an extraneous event during recording

Data Point #	Standardized Wind Speed	LAeq	Rotor RPM	10m Anemometer Wind Speed (m/s)	Air Temperature (°C)	Pressure (kPa)	Relative Humidity (%)
333	9.0	38.5	0.3	7.5	-3	99256.1	63
334	9.5	41.4	0.4	7.9	-3	99252.7	63
335	8.9	40.8	0.4	7.4	-3	99224.4	63
336	8.2	37.1	0.4	6.9	-3	98776.8	63
337	7.2	37.8	0.4	6.0	-3	99097.1	62
338	9.1	36.8	0.3	7.6	-3	99050.0	62
339	10.1	42.4	0.3	8.5	-3	99065.4	62
340	9.3	40.8	0.3	7.7	-3	99195.6	62
341	10.4	41.2	0.3	8.7	-3	98370.3	62
342	9.8	36.9	0.3	8.2	-3	98247.0	62
343	9.5	36.1	0.4	8.0	-3	98205.2	63
344	8.9	39.3	0.3	7.4	-3	99208.3	63
345	8.0	43.8	0.3	6.7	-3	98017.9	63
346	7.5	39.6	0.4	6.2	-3	97968.7	63
347	7.5	43.2	0.4	6.3	-3	97906.4	63
348	8.4	43.3	0.3	7.0	-3	97102.1	63
349	7.4	37.5	0.3	6.1	-3	98376.0	63
350	7.4	39.2	0.3	6.2	-3	97409.0	63
351	7.6	35.9	0.5	6.3	-3	99194.3	63
352	7.5	34.8	0.3	6.3	-3	97868.0	63
353	10.0	33.7	0.4	8.3	-3	98125.9	63
354	10.3	35.7	0.4	8.6	-3	97895.1	63
355	9.9	40.4	0.3	8.3	-3	97642.8	63
356	9.9	47.4	0.3	8.3	-3	97640.8	63
357	12.5	43.9	0.4	10.4	-3	98580.5	63
358	11.1	40.4	0.4	9.2	-3	99261.9	63
359	10.5	43.3	0.5	8.7	-3	99261.8	63
360	10.6	41.0	0.4	8.8	-3	99262.0	63
361	9.1	42.8	0.3	7.6	-3	99262.1	62
362	8.4	41.3	0.4	7.1	-3	99261.9	62
363	7.7	45.1	0.4	6.4	-3	99262.0	62
364	8.3	41.4	0.3	6.9	-3	99262.0	62
365	9.6	40.6	0.4	8.1	-3	99261.9	62
366	9.3	37.2	0.5	7.8	-3	99261.7	63
367	11.4	40.3	0.5	9.5	-3	99260.9	63
368	11.3	43.0	0.4	9.4	-3	99258.6	63
369	8.7	39.4	0.2	7.2	-3	99252.3	63
370	10.5	41.6	0.5	8.7	-3	99199.3	63
371	11.0	42.5	0.5	9.2	-3	99055.9	63
372	11.8	39.8	0.4	9.8	-3	98406.3	63
373	10.9	40.0	0.3	9.1	-3	97835.0	62
374	11.4	39.9	0.4	9.5	-3	98223.2	62
375	10.9	39.2	0.3	9.1	-3	98072.1	62
376	9.9	37.0	0.4	8.3	-3	98327.9	62
377	8.4	38.6	0.5	7.0	-3	98136.8	62
378	12.0	39.9	0.4	10.0	-3	98598.2	62
379	10.7	40.9	0.3	8.9	-3	98477.1	63
380	10.6	40.6	0.3	8.9	-3	98538.9	63
381	11.7	41.9	0.4	9.8	-3	98230.9	63
382	11.1	45.3	0.4	9.3	-3	98486.7	63
383	12.9	40.0	0.5	10.7	-3	99212.7	63
384	10.4	41.2	0.4	8.7	-3	99242.1	62
385	8.8	35.4	0.4	7.3	-3	99246.5	61
386	10.9	46.5	0.4	9.1	-3	99249.0	61
387	12.1	47.7	0.4	10.1	-3	99250.7	61
388	10.6	41.3	0.4	8.8	-3	99251.8	61
389	10.1	39.9	0.4	8.4	-3	99252.7	61
390	12.6	44.9	0.4	10.5	-3	99250.6	61
391	12.5	41.5	0.4	10.4	-3	99240.9	61
392	11.8	46.9	0.5	9.8	-3	99243.1	61
393	12.7	44.2	0.4	10.6	-3	99246.9	61
394	13.5	42.8	0.4	11.3	-3	99248.2	61
395	13.5	44.3	0.4	11.3	-3	99249.2	61
396	12.6	45.7	0.4	10.5	-3	99251.1	60
397	12.5	48.6	0.4	10.4	-3	99249.8	59
398	11.4	48.0	0.5	9.5	-3	99249.9	59
399	12.2	43.4	0.5	10.1	-3	99250.0	59
400	10.4	43.7	0.4	8.7	-3	99250.0	59
401	12.3	49.1	0.4	10.3	-3	99249.9	59
402	12.6	47.2	0.5	10.5	-3	99250.6	59
403	12.0	47.3	0.5	10.0	-3	99250.3	60
404	12.2	45.2	0.4	10.2	-3	99249.9	60
405	12.3	45.8	0.4	10.3	-3	99249.9	60
406	12.3	38.4	0.5	10.3	-3	99249.6	60
407	11.4	41.9	0.4	9.5	-3	99250.3	60
408	11.4	40.0	0.4	9.5	-3	99251.6	60
409	10.2	43.3	0.4	8.5	-4	99250.2	61
410	9.6	48.1	0.5	8.0	-4	99249.6	61
411	8.9	45.3	0.5	7.4	-4	99249.5	61
412	9.5	45.0	0.6	7.9	-4	99249.4	61
413	8.6	43.8	0.5	7.2	-4	99249.7	61
414	9.5	41.1	0.4	8.0	-4	99255.0	61
415	10.6	47.5	0.4	8.8	-4	99263.4	63

***Blank data denotes values that were omitted in the analysis due to an extraneous event during recording

Data Point #	Standardized Wind Speed	LAeq	Rotor RPM	10m Anemometer Wind Speed (m/s)	Air Temperature (°C)	Pressure (kPa)	Relative Humidity (%)
416	10.6	46.2	0.4	8.9	-4	99263.5	63
417	8.0	48.7	0.5	6.7	-4	99263.3	63
418	8.6	43.7	0.4	7.2	-4	99263.1	63
419	10.1	46.3	0.4	8.4	-4	99263.5	63
420	9.2	48.5	0.5	7.7	-4	99263.7	63
421	9.0	48.7	0.7	7.6	-3	99263.8	63
422	8.8	49.2	0.5	7.3	-3	99264.0	63
423	8.8	44.2	0.4	7.3	-3	99264.0	63
424	9.5	44.4	0.7	7.9	-3	99263.7	63
425	9.9	45.0	0.7	8.2	-3	99263.8	63
426	10.0	48.7	0.5	8.3	-3	99263.7	63
427			0.4	9.0	-3	99262.8	63
428			0.4	8.1	-3	99262.2	63
429	10.3	47.2	0.5	8.6	-3	99262.3	63
430	11.7	40.5	0.5	9.8	-3	99262.3	63
431	10.4	40.4	0.5	8.7	-3	99262.6	63
432	9.6	48.4	0.6	8.0	-3	99262.8	63
433	10.6	44.7	0.5	8.8	-3	99263.8	62
434	10.4	44.5	0.4	8.7	-3	99264.8	62
435	10.5	41.4	0.3	8.8	-3	99265.4	62
436	13.2	44.1	0.6	11.0	-3	99265.7	62
437	13.8	43.8	0.5	11.5	-3	99265.7	62
438	12.4	45.4	0.4	10.3	-3	99265.9	62
439	11.4	42.7	0.4	9.6	-3	99265.6	60
440	13.2	45.9	0.4	11.0	-3	99264.8	60
441	11.9	46.4	0.6	9.9	-3	99264.5	60
442	12.2	44.0	0.4	10.2	-3	99263.6	60
443	11.6	45.2	0.4	9.7	-3	99261.6	60
444	11.5	47.2	0.6	9.6	-3	99259.3	60
445	10.8	40.8	0.6	9.1	-3	99256.7	59
446	9.9	45.4	0.6	8.2	-3	99256.4	59
447	12.3	48.3	0.5	10.3	-3	99257.8	59
448			0.7	10.8	-3	99262.4	59
449			0.7	9.4	-3	99262.0	59
450	12.0	49.1	0.6	10.0	-3	99260.2	59
451	11.4	47.7	0.6	9.5	-3	99258.3	58
452	12.8	49.1	0.7	10.7	-3	99261.8	58
453			0.6	11.4	-3	99262.4	58
454	13.5	44.2	0.5	11.3	-3	99259.2	58
455	13.1	47.3	0.5	11.0	-3	99261.5	58
456	12.4	47.3	0.5	10.3	-3	99257.5	58
457	13.0	46.7	0.5	10.9	-3	99247.4	57
458	12.0	47.6	0.5	10.0	-3	99246.4	57
459	13.0	46.5	0.5	10.9	-3	99244.5	57
460	14.7	47.8	0.5	12.3	-3	99243.7	57
461			0.6	11.3	-3	99244.5	57
462			0.4	11.3	-3	99246.1	57
463			0.4	11.8	-3	99247.3	56
464			0.4	13.2	-3	99247.7	56
465			0.5	12.1	-3	99247.1	56
466	12.1	44.5	0.6	10.1	-3	99245.6	56
467	10.6	47.8	0.5	8.8	-3	99244.9	56
468	10.4	48.3	0.3	8.6	-3	99250.4	56
469	10.4	46.4	0.3	8.7	-3	99262.0	57
470	10.3	45.6	0.4	8.6	-3	99262.7	57
471	9.8	45.0	0.3	8.2	-3	99263.2	57
472	9.4	41.7	0.4	7.8	-3	99263.4	57
473	11.8	42.2	0.4	9.8	-3	99263.3	57
474	11.1	43.7	0.5	9.3	-3	99260.3	56
475	10.5	44.2	0.4	8.8	-3	99251.4	56
476	12.5	44.7	0.5	10.4	-3	99252.5	56
477	10.7	46.2	0.4	8.9	-3	99253.2	56
478	12.7	44.2	0.4	10.6	-3	99253.4	56
479	11.8	44.2	0.4	9.9	-3	99253.4	56
480	12.4	43.5	0.3	10.4	-3	99253.1	56
481	11.3	40.3	0.3	9.4	-3	99252.9	56
482	9.5	41.1	0.3	7.9	-3	99253.1	56
483	9.1	43.2	0.6	7.6	-3	99253.3	56
484	8.1	47.5	0.7	6.8	-3	99252.9	56
485			0.7	6.1	-3	99253.1	56
486	8.6	46.5	0.7	7.2	-3	99257.4	57
487	8.4	49.2	0.6	7.0	-3	99266.8	59
488			0.5	8.6	-3	99267.0	59
489	10.9	46.3	0.6	9.1	-3	99266.9	59
490			0.5	10.0	-3	99267.0	59
491	10.4	47.2	0.4	8.6	-3	99267.2	59
492	11.5	45.8	0.5	9.6	-3	99262.7	58
493	10.8	48.2	0.6	9.1	-3	99253.4	55
494	10.8	48.3	0.6	9.0	-3	99253.4	55
495	11.1	48.0	0.6	9.3	-3	99253.8	55
496			0.6	11.1	-3	99254.1	55
497	11.1	44.6	0.6	9.3	-3	99254.1	55
498			0.6	8.8	-3	99254.1	55

Table E.02 Measurement data - Background

Project: North Kent Wind Farm - Turbine T36 - IEC 61400-11 Measurement

Report ID: 17238.01.T36.RP2

Created on: 2/22/2019

***Blank data denotes values that were omitted in the analysis due to an extraneous event during recording

Data Point #	Standardized Wind Speed	LAeq	Rotor RPM	10m Anemometer Wind Speed (m/s)	Air Temperature (-C)	Pressure (kPa)	Relative Humidity (%)
499	11.8	48.4	0.6	9.9	-3	99254.3	57
500	11.6	45.9	0.6	9.7	-3	99254.2	57
501	13.2	46.5	0.5	11.0	-3	99254.2	57
502	11.0	46.4	0.6	9.2	-3	99254.2	57
503	11.1	45.4	0.6	9.3	-3	99254.2	57
504			0.5	10.4	-3	99254.2	56
505	10.6	45.5	0.5	8.9	-3	99254.3	56
506	12.3	48.2	0.7	10.3	-3	99254.3	56
507	11.2	43.3	0.8	9.3	-3	99254.5	56
508	10.1	41.9	0.7	8.4	-3	99253.9	56
509	11.7	48.9	0.6	9.8	-3	99286.8	50
510	12.1	44.3	0.5	10.1	-3	99286.9	50
511			0.5	8.6	-3	99286.9	50
512			0.6	8.5	-3	99286.5	50
513	12.0	45.7	0.5	10.0	-3	99287.2	50
514			0.6	10.4	-3	99287.2	50
515	12.2	45.7	0.6	10.2	-3	99287.5	50
516	11.3	44.4	0.7	9.4	-3	99287.3	50
517			0.6	10.3	-3	99287.0	50
518			0.6	9.0	-3	99287.2	50
519			0.6	8.0	-3	99287.4	50
520			0.6	8.9	-3	99298.4	52
521			0.6	7.3	-3	99301.3	52
522			0.5	6.7	-3	99301.3	52
523	8.4	46.7	0.6	7.0	-3	99301.5	52
524	10.1	47.1	0.4	8.4	-3	99301.4	52
525			0.4	10.3	-3	99301.3	52
526	11.5	47.6	0.4	9.6	-3	99301.4	52
527	11.7	49.4	0.4	9.7	-3	99301.5	51
528			0.3	10.1	-3	99301.5	51
529	11.2	49.4	0.4	9.3	-3	99301.2	51
530	10.9	48.2	0.4	9.1	-3	99301.0	51
531	11.9	44.0	0.4	9.9	-3	99300.0	51
532	11.3	48.3	0.5	9.4	-3	99300.3	50
533	9.6	45.0	0.5	8.0	-3	99300.6	50
534	10.8	42.4	0.5	9.0	-3	99300.8	50
535	10.4	45.3	0.4	8.7	-3	99300.7	50
536	11.6	45.5	0.3	9.6	-3	99300.5	50
537	11.4	46.0	0.4	9.6	-3	99300.6	50
538	10.3	47.1	0.4	8.6	-3	99300.8	51
539	10.0	45.7	0.4	8.4	-3	99301.2	51
540	10.7	42.3	0.4	8.9	-3	99300.7	51
541	10.4	47.7	0.5	8.7	-3	99300.7	51
542	9.1	47.0	0.5	7.6	-3	99300.9	51
543	10.8	45.7	0.4	9.1	-3	99301.0	51
544	11.4	48.8	0.4	9.6	-3	99300.9	51
545	10.8	40.5	0.3	9.0	-3	99301.1	51
546	12.0	49.4	0.4	10.0	-3	99301.2	51
547	11.8	49.4	0.5	9.8	-3	99300.6	51
548	11.1	48.1	0.4	9.3	-3	99301.0	51
549	11.0	46.3	0.4	9.2	-3	99301.0	51
550	11.8	46.9	0.4	9.9	-3	99301.1	51
551	11.4	45.4	0.4	9.5	-3	99300.9	51
552	9.7	48.2	0.4	8.1	-3	99300.8	51
553	9.5	47.6	0.5	7.9	-3	99300.8	51
554	8.8	45.8	0.5	7.3	-3	99301.0	51
555	9.1	47.3	0.5	7.6	-3	99300.8	51
556	10.3	42.0	0.6	8.6	-3	99300.8	51
557	10.8	41.7	0.7	9.1	-3	99300.8	52
558	12.8	42.6	0.6	10.7	-3	99301.2	52
559	12.4	41.2	0.5	10.4	-3	99301.5	52
560	11.6	41.3	0.5	9.7	-3	99301.5	52
561	10.8	39.8	0.5	9.0	-3	99301.5	52
562	9.4	40.9	0.5	7.9	-3	99301.6	51
563	9.4	38.1	0.5	7.8	-3	99301.5	51
564	10.0	33.6	0.3	8.3	-3	99301.5	51
565	9.2	40.3	0.3	7.7	-3	99301.5	51
566	9.1	45.6	0.4	7.6	-3	99301.3	51
567	9.6	43.6	0.4	8.0	-3	99301.4	51
568	11.4	39.0	0.5	9.5	-3	99301.1	53
569			0.5	9.7	-3	99301.0	53
570			0.5	8.8	-3	99301.6	53
571	11.1	43.1	0.6	9.3	-3	99301.2	53
572	12.7	44.1	0.4	10.6	-3	99300.7	53
573	11.5	47.3	0.5	9.6	-3	99301.2	53
574	12.6	41.6	0.6	10.6	-3	99301.0	51
575			0.6	8.2	-3	99300.9	51
576	9.6	49.0	0.5	8.0	-3	99300.9	51
577	10.9	47.0	0.6	9.1	-3	99301.1	51
578			0.5	9.6	-3	99301.0	51
579	13.5	49.4	0.5	11.3	-3	99301.2	51
580	14.1	47.4	0.5	11.8	-3	99289.7	50
581			0.5	12.0	-3	99286.2	50

***Blank data denotes values that were omitted in the analysis due to an extraneous event during recording

Data Point #	Standardized Wind Speed	LAeq	Rotor RPM	10m Anemometer Wind Speed (m/s)	Air Temperature (-C)	Pressure (kPa)	Relative Humidity (%)
582	14.2	47.0	0.3	11.8	-3	99286.3	50
583			0.2	9.9	-3	99286.2	50
584	9.6	46.1	0.3	8.0	-3	99286.6	50
585	10.7	44.0	0.4	8.9	-3	99287.1	50
586	10.9	44.8	0.4	9.1	-3	99298.2	51
587	9.4	47.3	0.4	7.9	-3	99301.0	51
588	9.5	45.5	0.4	7.9	-3	99300.6	51
589	11.7	45.3	0.5	9.8	-3	99299.8	51
590	12.1	44.0	0.5	10.1	-3	99299.4	51
591	10.7	44.6	0.4	9.0	-3	99299.5	51
592	10.0	44.9	0.5	8.4	-3	99299.7	51
593	12.2	44.8	0.4	10.2	-3	99299.7	51
594	12.6	44.7	0.5	10.5	-3	99299.8	51
595	12.5	46.2	0.5	10.4	-3	99300.1	51
596	10.3	49.2	0.4	8.6	-3	99300.4	51
597			0.4	9.1	-3	99301.5	51
598	12.5	47.9	0.5	10.4	-3	99300.7	51
599	10.5	48.4	0.4	8.7	-3	99300.8	51
600	9.2	46.6	0.4	7.7	-3	99300.9	51
601	8.5	48.3	0.4	7.1	-3	99301.1	51
602	9.3	47.1	0.5	7.7	-3	99301.1	51
603	9.2	45.0	0.5	7.7	-3	99302.3	51
604	10.2	47.2	0.4	8.5	-3	99315.3	52
605	11.2	48.9	0.4	9.4	-3	99315.5	52
606	10.7	44.4	0.3	8.9	-3	99315.4	52
607			0.6	8.0	-3	99315.5	52
608			0.5	8.2	-3	99315.2	52
609			0.4	9.1	-3	99315.2	52
610			0.5	7.7	-3	99315.1	52
611	9.0	48.3	0.5	7.5	-3	99314.4	52
612	10.1	47.5	0.5	8.4	-3	99314.9	52
613	10.8	44.0	0.5	9.1	-3	99315.1	52
614	11.6	42.8	0.5	9.7	-3	99315.0	52
615	14.7	44.4	0.4	12.3	-3	99313.1	52
616	14.9	47.1	0.5	12.5	-3	99300.7	51
617	12.3	47.9	0.6	10.3	-3	99300.6	51
618	11.7	48.4	0.5	9.8	-3	99300.7	51
619	12.4	47.9	0.4	10.3	-3	99301.0	51
620			0.5	9.3	-3	99301.3	51
621	12.2	46.8	0.6	10.2	-3	99302.1	51
622	11.1	44.1	0.5	9.3	-3	99314.6	51
623	9.6	45.0	0.5	8.1	-3	99315.0	51
624	8.7	42.6	0.6	7.2	-3	99315.5	51
625			0.5	6.9	-3	99315.6	51
626			0.4	9.3	-3	99315.6	51
627			0.4	9.0	-3	99315.5	51
628	13.0	45.5	0.5	10.8	-3	99315.5	52
629	12.8	42.1	0.4	10.7	-3	99315.1	52
630	12.9	44.2	0.4	10.7	-3	99315.2	52
631	12.6	45.3	0.4	10.6	-3	99314.2	52
632	10.8	42.4	0.4	9.0	-3	99314.2	52
633	12.4	40.8	0.5	10.3	-3	99314.2	52
634	11.9	45.6	0.4	9.9	-3	99314.4	52
635	11.1	46.5	0.4	9.2	-3	99314.5	52
636	10.3	47.1	0.5	8.6	-3	99314.6	52
637	8.7	41.8	0.5	7.2	-3	99314.2	52
638	9.3	40.7	0.6	7.7	-3	99314.2	52
639	10.3	39.9	0.4	8.6	-3	99314.5	52
640	11.0	40.4	0.5	9.2	-3	99315.0	53
641			0.4	8.3	-3	99315.0	53
642			0.4	7.7	-3	99314.5	53
643	10.1	49.3	0.4	8.4	-3	99314.9	53
644	8.2	46.8	0.5	6.8	-3	99339.6	51
645	7.5	46.0	0.6	6.3	-3	99338.7	51
646	8.5	46.8	0.5	7.1	-3	99339.3	51
647			0.6	9.0	-3	99343.1	52
648			0.6	8.2	-3	99352.5	53
649			0.6	9.0	-3	99352.6	53
650			0.5	9.2	-3	99352.2	53
651			0.5	9.5	-3	99352.2	53
652			0.5	10.0	-3	99351.4	53
653	11.3	47.4	0.5	9.5	-3	99348.5	53
654			0.5	11.4	-3	99337.7	53
655			0.4	11.6	-3	99338.2	53
656	13.2	49.3	0.4	11.0	-3	99338.4	53
657			0.5	11.1	-3	99338.4	53
658	12.3	48.8	0.5	10.2	-3	99338.8	53
659			0.5	9.9	-3	99343.2	53
660	11.8	47.6	0.5	9.8	-3	99351.7	51
661	12.3	41.8	0.5	10.2	-3	99351.6	51
662	11.8	48.6	0.5	9.9	-3	99351.2	51
663	12.1	44.4	0.5	10.1	-3	99351.1	51
664	11.2	48.8	0.5	9.3	-3	99351.0	51

***Blank data denotes values that were omitted in the analysis due to an extraneous event during recording

Data Point #	Standardized Wind Speed	LAeq	Rotor RPM	10m Anemometer Wind Speed (m/s)	Air Temperature (-C)	Pressure (kPa)	Relative Humidity (%)
665	11.4	47.3	0.5	9.5	-3	99350.7	51
666	11.1	45.7	0.5	9.3	-3	99350.9	52
667	10.4	45.8	0.5	8.7	-3	99350.4	52
668	10.1	42.4	0.5	8.4	-3	99350.0	52
669	11.0	47.1	0.5	9.2	-3	99349.6	52
670			0.6	11.9	-3	99349.7	52
671	14.1	47.3	0.5	11.8	-3	99343.0	51
672	14.0	45.1	0.5	11.7	-3	99324.9	51
673			0.5	10.5	-3	99325.1	51
674			0.4	10.7	-3	99325.3	51
675			0.4	9.1	-3	99325.5	51
676	8.9	47.8	0.4	7.5	-3	99325.7	51
677	8.8	49.4	0.4	7.3	-3	99334.5	51
678	9.6	48.6	0.5	8.0	-3	99351.4	53
679	10.8	47.8	0.4	9.0	-3	99351.3	53
680	11.6	47.3	0.4	9.7	-3	99351.4	53
681	11.3	47.5	0.4	9.4	-3	99351.5	53
682	12.3	47.9	0.5	10.3	-3	99352.5	53
683			0.5	10.5	-3	99353.1	52
684	11.1	46.4	0.5	9.3	-3	99352.3	51
685	11.7	47.8	0.5	9.8	-3	99352.7	51
686	12.3	47.6	0.6	10.2	-3	99353.0	51
687			0.4	9.4	-3	99353.3	51
688	10.6	47.6	0.5	8.9	-3	99353.6	51
689	11.7	49.0	0.4	9.8	-3	99353.7	52
690	13.3	44.1	0.5	11.1	-3	99353.9	52
691	12.7	43.1	0.5	10.6	-3	99353.6	52
692	12.9	40.5	0.5	10.8	-3	99353.4	52
693	12.3	40.2	0.4	10.3	-3	99354.2	52
694	13.8	40.5	0.4	11.5	-3	99354.4	52
695			0.6	10.5	-3	99348.0	52
696			0.5	10.5	-3	99340.6	51
697	13.1	48.7	0.4	11.0	-3	99340.5	51
698	11.5	48.1	0.5	9.6	-3	99341.4	51
699	11.2	46.1	0.5	9.3	-3	99340.9	51
700	9.6	48.8	0.4	8.0	-3	99340.6	51
701	9.4	47.5	0.4	7.8	-3	99349.4	52
702			0.4	7.9	-3	99353.8	53
703	11.1	48.7	0.3	9.3	-3	99353.8	53
704	10.9	47.4	0.3	9.1	-3	99353.8	53
705	9.6	46.1	0.4	8.0	-3	99353.9	53
706	11.7	46.0	0.4	9.8	-3	99353.9	53
707	10.9	47.9	0.4	9.1	-3	99354.0	52
708	12.0	42.9	0.5	10.0	-3	99354.1	52
709	11.8	41.4	0.5	9.9	-3	99354.4	52
710	12.3	36.3	0.5	10.3	-3	99355.0	52
711	12.1	39.8	0.5	10.1	-3	99354.9	52
712	12.0	40.9	0.6	10.1	-3	99354.6	52
713	13.1	43.0	0.5	10.9	-3	99354.7	52
714	12.4	46.3	0.5	10.3	-3	99354.7	52
715			0.5	10.8	-3	99354.9	52
716	10.8	49.4	0.4	9.0	-3	99355.2	52
717	10.8	49.1	0.6	9.0	-3	99355.2	52
718	11.0	48.5	0.5	9.2	-3	99355.3	52
719			0.5	10.8	-3	99355.5	53
720			0.6	11.6	-3	99355.1	53
721			0.4	10.3	-3	99355.3	53
722	12.9	48.9	0.4	10.8	-3	99355.3	53
723	11.8	40.3	0.5	9.8	-3	99355.3	53
724	10.8	42.6	0.6	9.0	-3	99355.0	53
725	9.5	44.1	0.6	7.9	-3	99355.3	53
726	10.7	45.1	0.5	8.9	-3	99355.2	54
727			0.6	9.1	-3	99355.3	54
728			0.5	8.0	-3	99355.3	54
729	9.8	47.2	0.4	8.1	-3	99355.3	54
730	9.9	46.4	0.3	8.3	-3	99355.4	54
731			0.4	8.6	-3	99355.4	54
732	11.5	43.9	0.5	9.6	-3	99354.8	53
733	11.7	37.2	0.6	9.7	-3	99355.0	53
734	10.9	43.1	0.5	9.1	-3	99355.5	53
735	9.4	47.5	0.6	7.9	-3	99355.1	53
736	9.5	47.3	0.5	8.0	-3	99355.2	53
737	10.1	48.5	0.5	8.4	-3	99355.4	53
738			0.4	7.5	-3	99355.3	54
739	9.6	46.7	0.6	8.0	-3	99355.3	54
740			0.8	7.9	-3	99355.4	54
741			0.6	10.6	-3	99354.7	54
742			0.6	10.5	-3	99354.8	54
743			0.4	9.9	-3	99354.6	53
744			0.5	10.4	-3	99354.8	53
745	13.3	49.3	0.5	11.1	-3	99355.2	53
746	13.7	47.4	0.6	11.4	-3	99355.3	53
747	10.7	48.9	0.4	9.0	-3	99355.2	53

Table E.02 Measurement data - Background

Project: North Kent Wind Farm - Turbine T36 - IEC 61400-11 Measurement

Report ID: 17238.01.T36.RP2

Created on: 2/22/2019

***Blank data denotes values that were omitted in the analysis due to an extraneous event during recording

Data Point #	Standardized Wind Speed	LAeq	Rotor RPM	10m Anemometer Wind Speed (m/s)	Air Temperature (-C)	Pressure (kPa)	Relative Humidity (%)
748	10.2	49.4	0.5	8.5	-3	99355.4	53
749	12.0	46.2	0.4	10.1	-3	99355.5	54
750			0.5	10.1	-3	99355.4	54
751	10.4	45.5	0.6	8.7	-3	99355.4	54
752	9.4	46.0	0.5	7.8	-3	99355.0	54
753	10.5	49.1	0.6	8.8	-3	99354.4	54
754			0.7	8.1	-3	99354.4	54
755			0.5	8.1	-3	99354.5	54
756			0.5	10.4	-3	99355.0	55
757			0.5	10.3	-3	99355.2	55
758			0.6	10.9	-3	99355.4	55
759			0.5	9.7	-3	99355.4	55
760			0.5	9.4	-3	99355.4	55
761	13.3	48.7	0.5	11.1	-3	99355.7	53
762			0.6	9.9	-3	99355.2	53
763			0.4	10.2	-3	99355.1	53
764	11.1	49.2	0.3	9.3	-3	99354.3	53
765			0.4	9.7	-3	99354.6	53
766	12.2	48.9	0.5	10.2	-3	99355.1	53
767	11.3	47.1	0.5	9.5	-3	99354.7	52
768	9.9	43.4	0.5	8.3	-3	99354.7	52
769	9.8	46.8	0.4	8.2	-3	99354.6	52
770	11.5	47.0	0.6	9.6	-3	99355.0	52
771	10.1	47.7	0.5	8.5	-3	99355.1	52
772	10.6	43.0	0.5	8.8	-3	99354.8	52
773	13.6	44.2	0.6	11.3	-3	99354.8	54
774	13.1	46.4	0.4	11.0	-3	99354.9	54
775			0.5	12.6	-3	99354.9	54
776			0.5	13.2	-3	99355.0	54
777			0.5	11.8	-3	99354.9	54
778			0.6	11.4	-3	99354.6	54
779	13.4	47.7	0.6	11.2	-3	99354.8	51
780	13.0	43.5	0.5	10.8	-3	99354.8	51
781			0.5	11.3	-3	99355.0	51
782			0.5	10.5	-3	99355.0	51
783			0.5	12.0	-3	99355.2	51
784			0.4	11.0	-3	99355.1	51
785			0.4	10.2	-3	99355.3	51
786			0.5	10.3	-3	99355.3	51
787			0.4	11.0	-3	99355.0	51
788	12.5	45.4	0.4	10.4	-3	99354.4	51
789	10.9	47.2	0.4	9.1	-3	99354.9	51
790	9.9	43.1	0.4	8.3	-3	99354.5	51
791	11.1	48.3	0.4	9.3	-3	99355.0	52
792	11.6	47.2	0.4	9.7	-3	99355.3	53
793	12.0	42.6	0.4	10.0	-3	99355.6	53
794	12.7	43.2	0.5	10.6	-3	99355.4	53
795	12.8	42.4	0.6	10.7	-3	99355.7	53
796	10.8	44.2	0.6	9.0	-3	99355.5	53
797	10.5	48.1	0.5	8.7	-3	99355.1	53
798			0.4	7.3	-3	99355.4	53
799			0.5	8.6	-3	99354.4	53
800	11.8	48.0	0.5	9.8	-3	99355.3	53
801			0.4	9.6	-3	99355.0	53
802			0.3	8.8	-3	99355.3	53
803			0.4	8.3	-3	99354.7	54
804	12.4	48.7	0.5	10.4	-3	99354.4	54
805	11.8	47.9	0.4	9.8	-3	99354.7	54
806			0.5	10.9	-3	99355.0	54
807	11.6	45.2	0.5	9.6	-3	99354.9	54
808	12.1	45.5	0.5	10.1	-3	99354.7	54
809	12.0	41.2	0.5	10.0	-3	99354.5	53
810	10.6	40.0	0.5	8.8	-3	99354.4	52
811	9.7	46.3	0.5	8.1	-3	99354.6	52
812	9.4	49.2	0.4	7.9	-3	99354.6	52
813	10.6	48.7	0.7	8.9	-3	99355.1	52
814			0.5	9.5	-3	99355.3	52
815	9.8	45.3	0.5	8.2	-3	99354.7	52
816	10.1	45.1	0.5	8.5	-3	99354.5	52
817	10.4	42.8	0.5	8.6	-3	99354.8	52
818	10.9	44.4	0.5	9.1	-3	99354.8	52
819			0.6	10.1	-3	99354.9	52
820			0.5	12.4	-3	99355.1	52
821	12.7	49.2	0.5	10.6	-3	99354.8	52
822	12.1	48.4	0.5	10.1	-3	99355.1	52
823	13.8	47.1	0.6	11.5	-3	99354.8	52
824			0.6	11.0	-3	99354.4	52
825			0.6	11.7	-3	99355.1	52
826	14.4	49.0	0.7	12.1	-3	99354.9	52
827			0.5	11.6	-3	99354.7	51
828			0.4	13.5	-3	99354.6	51
829			0.5	14.3	-3	99354.9	51
830			0.5	12.6	-3	99354.6	51

***Blank data denotes values that were omitted in the analysis due to an extraneous event during recording

Data Point #	Standardized Wind Speed	LAeq	Rotor RPM	10m Anemometer Wind Speed (m/s)	Air Temperature (-C)	Pressure (kPa)	Relative Humidity (%)
831	13.5	49.1	0.5	11.3	-3	99355.3	51
832	12.2	47.9	0.6	10.2	-3	99355.4	51
833	12.3	42.6	0.6	10.3	-3	99355.5	52
834	11.5	49.4	0.5	9.6	-3	99355.7	52
835	11.7	48.8	0.4	9.7	-3	99355.3	52
836	12.6	47.4	0.6	10.5	-3	99355.5	52
837			0.7	9.6	-3	99355.7	52
838	11.8	43.4	0.6	9.8	-3	99355.1	52
839	10.2	39.1	0.5	8.5	-3	99354.7	51
840	11.2	45.4	0.7	9.4	-3	99354.8	51
841	10.2	49.3	0.6	8.5	-3	99354.9	51
842	8.1	49.1	0.6	6.8	-3	99354.7	51
843	9.5	47.9	0.7	7.9	-3	99355.2	51
844	8.9	48.3	0.4	7.5	-3	99361.2	52
845	8.0	43.3	0.4	6.7	-3	99367.7	53
846	7.6	44.7	0.3	6.3	-3	99367.5	53
847	10.4	46.7	0.3	8.7	-3	99367.8	53
848			0.4	9.4	-3	99367.5	53
849	9.2	45.8	0.4	7.7	-3	99367.8	53
850	8.4	46.4	0.4	7.0	-3	99367.1	53
851	10.5	45.5	0.5	8.8	-3	99367.4	53
852	12.2	47.6	0.5	10.2	-3	99367.8	53
853	12.6	44.6	0.5	10.5	-3	99367.3	53
854	13.3	47.9	0.4	11.1	-3	99367.5	53
855	13.4	43.4	0.5	11.2	-3	99367.5	53
856	12.8	39.7	0.5	10.7	-3	99367.6	52
857			0.3	9.2	-3	99367.3	51
858	9.6	43.6	0.2	8.0	-3	99367.5	51
859	10.4	39.4	0.3	8.7	-3	99367.2	51
860	9.5	40.0	0.4	7.9	-3	99367.2	51
861	9.3	44.0	0.4	7.8	-3	99367.1	51
862	9.5	43.9	0.5	7.9	-3	99367.0	52
863	9.7	42.3	0.4	8.1	-3	99366.9	52
864	9.1	45.7	0.5	7.6	-3	99366.6	52
865	10.1	44.8	0.5	8.4	-3	99366.0	52
866			0.5	9.7	-3	99365.4	52
867	12.5	47.3	0.5	10.4	-3	99364.5	52
868	13.6	48.0	0.4	11.4	-3	99357.9	52
869			0.5	10.8	-3	99348.0	52
870	12.3	47.0	0.4	10.3	-3	99346.0	52
871	12.8	47.5	0.5	10.7	-3	99345.3	52
872	14.0	47.9	0.4	11.7	-3	99346.0	52
873	13.7	43.8	0.4	11.5	-3	99348.1	52
874	14.0	45.6	0.4	11.7	-3	99350.6	52
875	12.9	48.3	0.4	10.8	-3	99349.5	52
876	11.9	48.5	0.5	10.0	-3	99349.6	52
877	11.0	47.6	0.4	9.2	-3	99349.3	52
878	11.2	44.7	0.4	9.3	-3	99349.6	52
879	11.4	49.1	0.2	9.5	-3	99350.1	52
880			0.3	9.4	-3	99360.0	52
881			0.4	11.4	-3	99360.8	53
882	12.6	48.1	0.4	10.5	-3	99360.5	53
883	10.4	47.7	0.3	8.7	-3	99359.5	53
884	13.0	47.0	0.3	10.9	-3	99354.3	53
885	10.6	46.0	0.4	8.9	-3	99341.8	53
886	10.5	47.9	0.4	8.8	-3	99334.3	53
887	10.7	49.3	0.4	8.9	-3	99320.7	54
888	10.6	43.6	0.4	8.8	-3	99286.6	54
889	10.2	46.9	0.4	8.5	-3	99251.7	54
890			0.4	9.3	-3	99171.2	54
891	12.1	48.3	0.5	10.1	-3	98913.1	54
892	10.3	45.3	0.5	8.6	-3	98680.0	54
893			0.4	8.3	-3	97890.3	54
894	11.1	43.4	0.4	9.2	-3	99224.4	54
895	11.2	45.7	0.4	9.4	-3	99258.6	54
896	10.8	48.4	0.4	9.0	-3	99276.4	54
897	10.0	48.0	0.3	8.4	-3	99268.6	54
898	11.8	43.1	0.3	9.8	-3	99205.1	54
899	11.6	48.2	0.3	9.7	-3	98580.4	55
900	11.3	43.7	0.3	9.4	-3	98286.7	55
901	10.4	42.8	0.6	8.6	-3	99111.1	55
902	12.1	42.0	0.6	10.1	-3	99289.3	55
903	12.4	40.9	0.5	10.3	-3	99303.7	55
904	11.0	45.7	0.4	9.2	-3	99288.8	53
905	10.6	43.1	0.5	8.8	-3	99251.1	52
906	10.7	41.2	0.6	9.0	-3	98987.9	52
907	10.0	44.6	0.4	8.3	-3	98274.0	52
908	9.7	45.9	0.4	8.1	-3	98909.7	52
909	10.2	49.4	0.5	8.5	-3	99307.5	52
910	9.4	46.3	0.5	7.9	-3	99360.0	54
911	9.6	48.2	0.6	8.0	-3	99368.1	54
912	9.0	45.4	0.5	7.5	-3	99372.1	54
913	7.6	46.4	0.6	6.3	-3	99373.5	54

***Blank data denotes values that were omitted in the analysis due to an extraneous event during recording

Data Point #	Standardized Wind Speed	LAeq	Rotor RPM	10m Anemometer Wind Speed (m/s)	Air Temperature (-C)	Pressure (kPa)	Relative Humidity (%)
914	9.5	44.8	0.5	8.0	-3	99374.3	54
915	9.4	47.0	0.5	7.8	-3	99374.8	54
916	8.4	46.4	0.4	7.0	-3	99376.5	56
917	8.9	46.6	0.4	7.4	-3	99376.0	57
918	12.1	48.5	0.3	10.1	-3	99377.4	57
919	11.8	49.2	0.5	9.9	-3	99378.9	57
920	11.8	48.7	0.4	9.9	-3	99379.1	57
921	11.6	44.7	0.4	9.7	-3	99379.7	57
922	9.4	46.0	0.4	7.8	-3	99380.3	54
923	10.0	47.1	0.5	8.4	-3	99381.0	54
924	10.6	46.2	0.5	8.9	-3	99381.3	54
925	10.5	45.0	0.5	8.8	-3	99381.1	54
926	10.3	43.8	0.3	8.6	-3	99381.0	54
927	11.8	46.7	0.4	9.8	-3	99380.7	54
928	10.6	46.8	0.4	8.8	-3	99381.3	55
929	10.8	43.8	0.4	9.0	-3	99381.9	55
930	11.1	47.1	0.4	9.3	-3	99381.6	55
931			0.4	8.5	-3	99381.9	55
932	9.9	49.3	0.5	8.3	-3	99381.6	55
933	9.6	47.3	0.4	8.0	-3	99382.0	55
934	10.0	47.0	0.5	8.4	-3	99381.0	56
935	9.7	47.6	0.5	8.1	-3	99381.1	56
936			0.5	8.9	-3	99380.8	56
937	10.3	47.8	0.5	8.6	-3	99381.2	56
938	8.2	46.7	0.5	6.9	-3	99381.6	56
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aercoustics

Aercoustics Engineering Ltd.
1004 Middlegate Road, Suite 1100
Mississauga, ON L4Y 0G1

Tel: 416-249-3361
Fax 416-249-3613
aercoustics.com

Appendix F
Supplementary Information for the Regulator

aercoustics

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Appendix F.01
Calibration Certificates

Certificate number: **2018-22163146**

Adjustment report

Product type: LMS SCADAS

Calibration Suite: **Calibration Software**
Calibration Suite Version: **2.10.0001**

Customer:

Company name :Aercoustics Engineering Limited
Location (city / country) : Mississauga / ON
Contact person : Iwona Stasiewicz

System:

System type(s) : SCR202
Serial number(s) : 22163146

Adjustment conditions:

TAC reference number : 8946966
Location (factory, office or on-site) : factory
Date : February 27, 2018
Ambient temperature : 23,4 ºC
Previous adjustment / calibration date : August 2016

Adjustment results (refer to page 2 for details) :

Adjustment successful : YES
Within published specification : YES
Within test specification : YES

Report approved by:

Name : Mr. H. Dam

(Signature)..... ... .

Siemens Industry Software
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Siemens PLM Software
5755 New King Street
Troy, MI 48098
USA
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ISO17025

As Left RECALIBRATION CERTIFICATE

Sales Region:	NA
Account:	Aercoustics Engineering Limited
Instrument:	LMS SCADAS
Manufacturer:	Siemens Industry Software B.V.
Type:	SCR202
Serial number(s):	22163146
Calibration method:	Two calibrated external standards (DC voltage and frequency) are used to calibrate the internal LMS SCADAS references: time/frequency accuracy of the internal system clock and amplitude accuracy of the internal signal sources. All input channels are calibrated against the internal references.
Ambient conditions:	The calibrations have been carried out in a controlled environment, at an ambient temperature of 23.3°C ± 0.3°C and a relative humidity of 21% ± 5%.
Calibration date:	February 27, 2018
Results:	The calibration results, together with their associated uncertainties, are included in this calibration certificate. *Calibration results within specification.*
Uncertainty:	The reported expanded uncertainty of measurement is stated as the standard uncertainty of measurement multiplied by the coverage factor k=2, which for a normal distribution corresponds to a coverage probability of approximately 95%. The standard uncertainty of measurement has been determined in accordance with publication EA-4/02.
Traceability:	The measurements have been executed using methods for which the traceability to international standards has been demonstrated towards the Raad voor Accreditatie.

Breda, *February 27, 2018*

Calibration performed by:

Hans Dam, Customer Service Engineer

Certificate approved by:

F.Lemmens, Production Manager

The Raad voor Accreditatie is one of the signatories of the Multilateral Agreement of the European Cooperation for Accreditation (EA) for the mutual recognition of calibration certificates.

This certificate is issued provided that neither Siemens Industry Software B.V. nor the Raad voor Accreditatie assumes any liability.

Siemens Industry Software B.V.
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The Netherlands
Phone: +31 76 573 6363

ISO17025

As Found RECALIBRATION CERTIFICATE

Sales Region:	NA
Account:	Aercoustics Engineering Limited
Instrument:	LMS SCADAS
Manufacturer:	Siemens Industry Software B.V.
Type:	SCR202
Serial number(s):	22163146
Calibration method:	Two calibrated external standards (DC voltage and frequency) are used to calibrate the internal LMS SCADAS references: time/frequency accuracy of the internal system clock and amplitude accuracy of the internal signal sources. All input channels are calibrated against the internal references.
Ambient conditions:	The calibrations have been carried out in a controlled environment, at an ambient temperature of 23.4°C ± 0.3°C and a relative humidity of 19% ± 5%.
Calibration date:	February 27, 2018
Results:	The calibration results, together with their associated uncertainties, are included in this calibration certificate. *Calibration results within specification.*
Uncertainty:	The reported expanded uncertainty of measurement is stated as the standard uncertainty of measurement multiplied by the coverage factor k=2, which for a normal distribution corresponds to a coverage probability of approximately 95%. The standard uncertainty of measurement has been determined in accordance with publication EA-4/02.
Traceability:	The measurements have been executed using methods for which the traceability to international standards has been demonstrated towards the Raad voor Accreditatie.

Breda, February 27 2018

Calibration performed by:

Hans Dam, Customer Service Engineer

Certificate approved by:

Frank Lemmens, Production Manager

Siemens Industry Software B.V.
Weidehek 53
4824 AT Breda
The Netherlands
Phone: +31 76 573 6363

West Caldwell Calibration Laboratories Inc.

Certificate of Calibration

for

MICROPHONE UNIT

Manufactured by:	BRUEL & KJAER
Model No:	4189-A-021
Serial No:	2622169
Calibration Recall No:	28016

Submitted By:

Customer:

Company: Aercoustics Engineering LTD.

Address:

The subject instrument was calibrated to the indicated specification using standards traceable to the National Institute of Standards and Technology or to accepted values of natural physical constants. This document certifies that the instrument met the following specification upon its return to the submitter.

West Caldwell Calibration Laboratories Procedure No. 4189-A-021 BRUE

Upon receipt for Calibration, the instrument was found to be:

Within (X)

tolerance of the indicated specification. See attached Report of Calibration.

West Caldwell Calibration Laboratories' calibration control system meets the requirements, ISO 10012-1 MIL-STD-45662A, ANSI/NCSL Z540-1, IEC Guide 25, ISO 9001:2008 and ISO 17025.

Note: With this Certificate, Report of Calibration is included.

Approved by: FC

Felix Christopher (QA Mgr.)

Calibration Date: 05-Sep-17

Certificate No: 28016 - 1

ISO/IEC 17025:2005

ACCREDITED

Calibration Lab. Cert. # 1533.01

uncompromised calibration West Caldwell Calibration Laboratories, Inc.
1575 State Route 96, Victor, NY 14564, U.S.A.

West Caldwell Calibration Laboratories, Inc.
uncompromised calibration
1575 State Route 96, Victor NY 14564

ISO/IEC 17025: 2005
ACCREDITED
Calibration Lab. Cert. # 1533.01

REPORT OF CALIBRATION

for

Brüel & Kjær Microphone Unit

Model No.: 4189-A-021 Serial No.: 2622169
Mic. Model No.: 4189 Serial No.: 2625417
Preamp. Model No.: 2671 Serial No.: 2614900
Company: Aercoustics Engineering LTD. I. D. No.: XXXX

Calibration results:

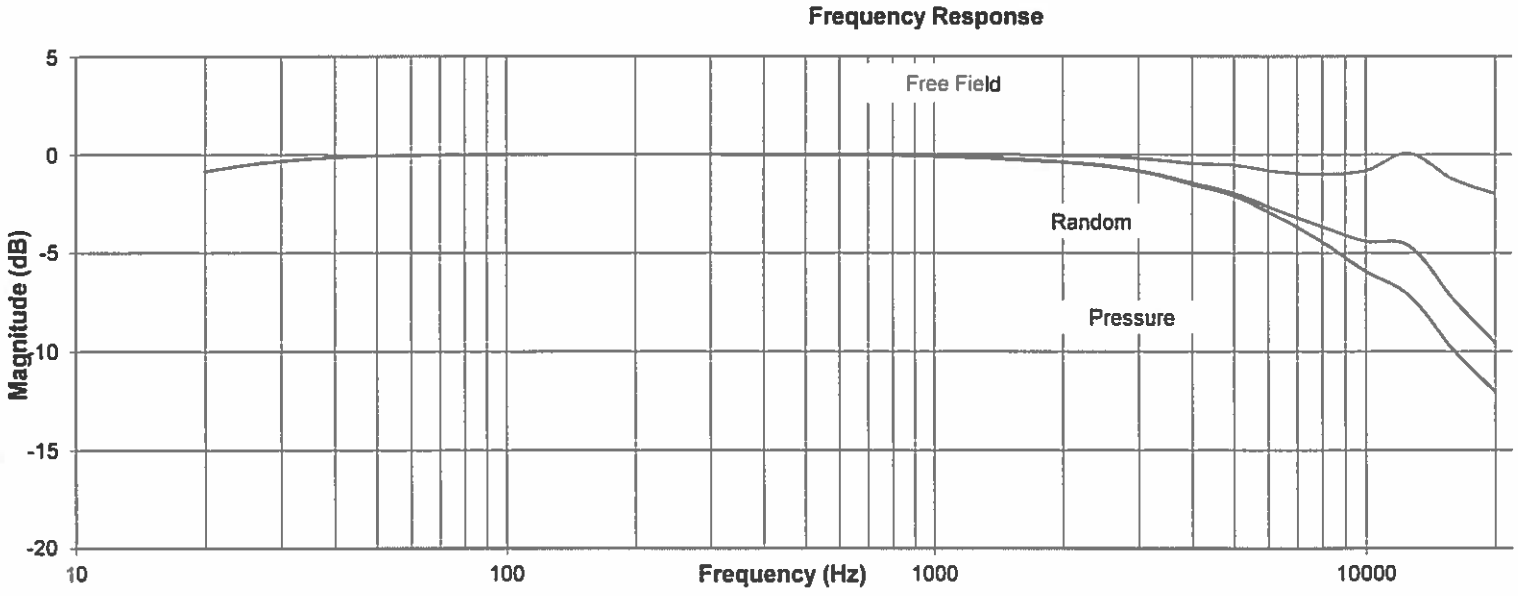
Before & after data same: ...X...

Combined Sensitivity @	250	Hz	and pressure of	98.432	kPa	
(Sens. with mic. and preamp.)	0	Volts Polarization voltage (External):				
	-26.54	dB re.1V/Pascal				
	47.10	mV/Pascal				
	0.54	Ko (- dB re 50 mV/Pascal)				
Sensitivity:	Pass					
Freq. Response:	Pass					
All tests:	Pass					

Ambient Temperature:	21.8	°C
Ambient Humidity:	56.4	% RH
Ambient Pressure:	98.432	kPa
Calibration Date:	5-Sep-2017	
Calibration Due:	5-Sep-2018	
Report Number:	28016	-1
Control Number:	28016	

The above listed instrument meets or exceeds the tested manufacturer's specifications.
The IEC 651:1979 & 1993 Type 1 specification passed.
This Calibration is traceable through NIST test numbers: 683/284413-14
The expanded uncertainty of calibration: 0.079dB at 95% confidence level with a coverage factor of k=2.

The pressure response recorded with electroacoustic method.



The above listed instrument was checked using calibration procedure documented in West Caldwell Calibration Laboratories Inc. procedure : **Rev. 7.0 Jan. 24, 2014 Doc. # 1038 P4189A021B&K**

Calibration was performed by West Caldwell Calibration Laboratories Inc. under Operating Procedures intended to implement the requirements of ISO10012-1, IEC Guide 25, ANSI/NCSL Z540-1, (MIL-STD-45662A) and ISO 9001:2008, ISO 17025

Measurements performed by: .....
James Zhu

Calibrated on WCCL system type 9700

West Caldwell Calibration Laboratories Inc.
1575 State Route 96, Victor NY 14564
Tel. (585) 586-3900 FAX (585) 586-4327

Calibration Data Record

for

Brüel & Kjær Microphone Unit **Model No.: 4189-A-021** **Serial No.: 2622169**
Company: Aercoustics Engineering LTD. **I. D. No.: XXXX**

Frequency Response (Reference = 0 dB @ 250Hz)

Frequency [Hz]	Pressure [dB]	Free Field (dB)	Random (dB)
19.95	-0.85	-0.85	-0.85
25.12	-0.51	-0.51	-0.51
31.62	-0.28	-0.28	-0.28
39.81	-0.14	-0.14	-0.14
50.12	-0.06	-0.06	-0.06
63.10	-0.02	-0.02	-0.02
79.43	-0.01	-0.01	-0.01
100.00	0.00	0.00	0.00
125.89	0.00	0.00	0.00
158.49	0.00	0.00	0.00
199.53	0.01	0.01	0.01
251.19	0.00	0.00	0.00
316.23	0.00	0.00	0.00
398.11	-0.01	0.00	-0.01
501.19	-0.01	0.01	-0.01
630.96	-0.02	0.01	-0.02
794.33	-0.05	0.02	-0.05
1000.00	-0.09	0.01	-0.11
1258.93	-0.14	0.01	-0.17
1584.89	-0.23	-0.01	-0.29
1995.26	-0.39	-0.06	-0.39
2511.89	-0.59	-0.11	-0.55
3162.28	-0.94	-0.23	-0.91
3981.07	-1.51	-0.45	-1.42
5011.87	-2.11	-0.53	-1.97
6309.57	-3.15	-0.87	-2.83
7943.28	-4.38	-1.00	-3.63
10000.00	-5.92	-0.80	-4.39
12589.25	-7.13	0.07	-4.62
15848.93	-9.80	-1.21	-7.22
19952.62	-12.02	-1.97	-9.54

Freq. response: Expanded Uncertainty (dB) with coverage factor K = 2
20 to 63Hz 0.1dB, 63 to 12.5kHz 0.094dB, 12.5k to 16kHz 0.10dB, 16k to 20kHz 0.5dB.

Instruments used for calibration:			Date of Cal.	Traceability No.	Re-cal. Due Date
Brüel & Kjær	4226	S/N 1445428	3-Nov-2016	683/284413-14	3-Nov-2017
Brüel & Kjær	3560	S/N 2202374	3-Nov-2016	683/284413-14	3-Nov-2017
HP	33120A	S/N 36043716	1-Oct-2016	,287708	1-Oct-2017
HP	34401A	S/N 36064102	1-Oct-2016	,287708	1-Oct-2017

Cal. Date: 5-Sep-2017 **Tested by: James Zhu**

Calibrated on WCCL system type 9700

Rev. 7.0 Jan. 24, 2014 Doc. # 1038 P4189A021B&K

West Caldwell Calibration Laboratories Inc.

Certificate of Calibration

for

ACOUSTICAL CALIBRATOR

Manufactured by:	**BRUEL & KJAER**
Model No:	**4231**
Serial No:	**3012380**
Calibration Recall No:	**28460**

Submitted By:

Customer:

Company: **Aercoustics Engineering Ltd.**
Address:

The subject instrument was calibrated to the indicated specification using standards traceable to the National Institute of Standards and Technology or to accepted values of natural physical constants. This document certifies that the instrument met the following specification upon its return to the submitter.

West Caldwell Calibration Laboratories Procedure No. **4231** **BRUE**

Upon receipt for Calibration, the instrument was found to be:

Within **(X)**

tolerance of the indicated specification. See attached Report of Calibration.
The information supplied relates to the calibrated item listed above.
West Caldwell Calibration Laboratories' calibration control system meets the requirements, ISO 10012-1 MIL-STD-45662A, ANSI/NCSL Z540-1, IEC Guide 25, ISO 9001:2008 and ISO 17025.

Note: With this Certificate, Report of Calibration is included.

Approved by: FC

Calibration Date: **30-Jan-18**

Felix Christopher (QA Mgr.)

Certificate No: **28460 - 2**

ISO/IEC 17025:2005

ACCREDITED

Calibration Lab. Cert. # 1533.01

uncompromised calibration **West Caldwell Calibration Laboratories, Inc.**
1575 State Route 96, Victor, NY 14564, U.S.A.

West Caldwell Calibration Laboratories, Inc.
uncompromised calibration
1575 State Route 96, Victor NY 14564

ISO/IEC 17025: 2005
ACCREDITED
Calibration Lab. Cert. # 1533.01

REPORT OF CALIBRATION

for

Brüel & Kjær Acoustical Calibrator **Model No.: 4231** **Serial No.: 3012380**
Company: Aercoustics Engineering Ltd. **ID No.: XXXX**

Calibration results:

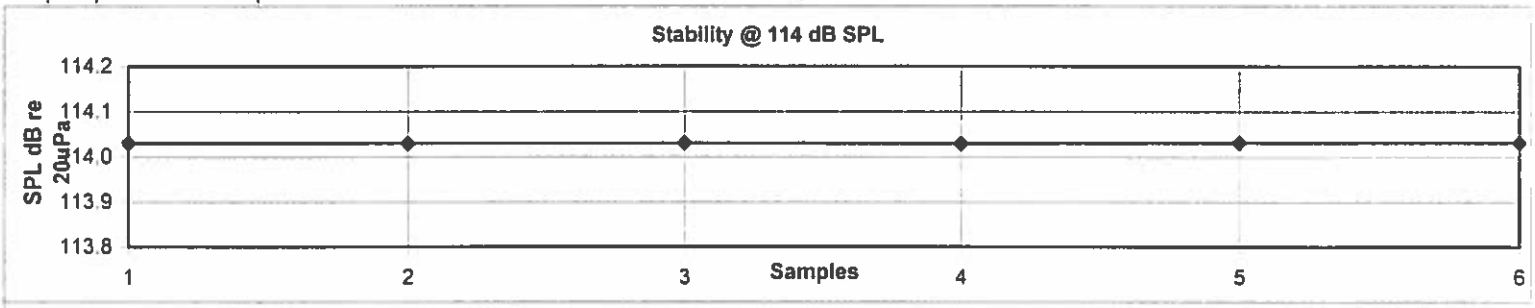
Before data: ..... After data: .....
Before & after data same: ...X...
Sound Pressure Level at 1000.0 Hz and pressure of 1013 hPa (mbar)
was 114.03 dB re 20 µPa
(Calibrator tested with ½" adaptor UC 0210)
IEC 1094-4 Type WS 2 P Microphone was used for measurement.

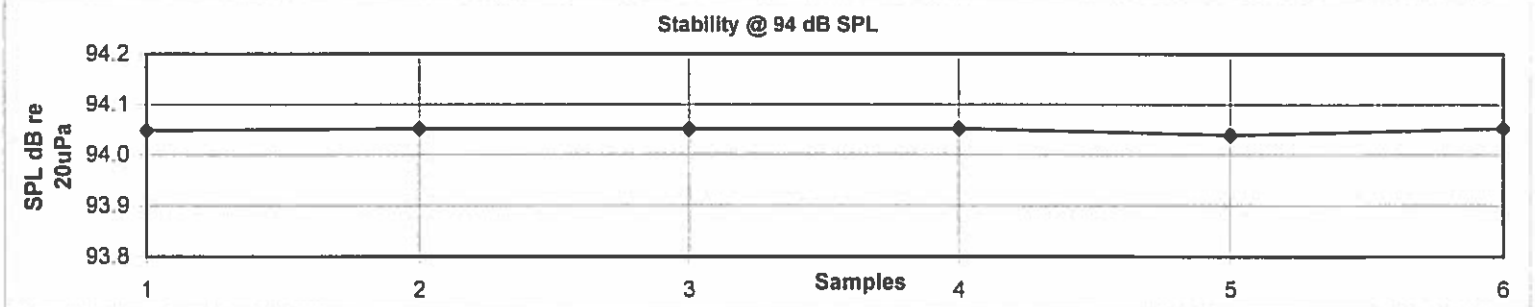
	114 dB	94 dB
Sound Pressure Level:	Pass	Pass
Frequency:	Pass	Pass
Distortion:	Pass	Pass
Stability:	Pass	Pass
All tested parameters:		Pass

The above listed instrument meets or exceeds the tested manufacturer's specifications
The IEC 942:1988 Class 1 specifications, passed.
The ANSI S1.4-1984 specifications, passed.
This Calibration is traceable through NIST test numbers: 822/275722-14
The expanded uncertainty of calibration: 0.11 dB at 95% confidence level with a coverage factor of k=2.

Laboratory Environment:		
Ambient Temperature:	22.0	°C
Ambient Humidity:	30.9	% RH
Ambient Pressure:	99.768	kPa
Calibration Date:	30-Jan-2018	
Calibration Due:	30-Jan-2019	
Report Number:	28460 -2	
Control Number:	28460	

Graph represents six samples of Sound Pressure Level measured at 5 sec. interval.





The above listed instrument was checked using calibration procedure documented in West Caldwell Calibration Laboratories Inc. procedure : **Rev. 7.0 Jan. 24, 2014 Doc. # 1038 4231B&K**

Calibration was performed by West Caldwell Calibration Laboratories Inc. under Operating Procedures intended to implement the requirements of ISO10012-1, IEC Guide 25, ANSI/NCSL Z540-1, (MIL-STD-45662A) and ISO 9001:2008, ISO 17025

Cal. Date: 30-Jan-2018

Measurements performed by: .....
James Zhu

Calibrated on WCCL system type 9700

Rev. 7.0 Jan. 24, 2014 Doc. # 1038 4231B&K

West Caldwell Calibration Laboratories Inc.
1575 State Route 96, Victor NY 14564
Tel. (585) 586-3900 FAX (585) 586-4327

Calibration Data Record

for

Brüel & Kjær Acoustical Calibrator **Model No.: 4231** **Serial No.: 3012380**
Company: Aercoustics Engineering Ltd.

All tested parameters: Pass

Measured Sound Pressure Level (Six samples measured at 5 sec. interval)

Sample	1	114.03 dB re 20 µPa	94.05 dB re 20 µPa	
	2	114.03	94.05	
	3	114.03	94.05	
	4	114.03	94.05	
	5	114.03	94.04	
	6	114.03	94.05	
	Average	**114.03** Spec. 114dB ± 0.2dB	**94.05**	Spec. 94 dB ± 0.2 dB

Frequency measured (Three samples at 30 sec. Interval)

Sample	1	999.99 Hz	999.99 Hz	
	2	999.99	999.99	
	3	999.99	999.98	
	Average	**999.99**	**999.99**	Spec. 1000 Hz ±0.1%

The Frequency expanded uncertainty of calibration:45 µHz/Hz at 95% confidence level with a coverage factor of k=2.

Distortion measured	-56.2 dB	-54.9 dB	Spec. ≤-40 dB

Instruments used for calibration:			Date of Cal.	Traceability No.	Re-cal. Due Date
Brüel & Kjær	4231	S/N 2308998	1-Aug-2017	822/275722-14	1-Aug-2018
Brüel & Kjær	4134	S/N 854464	1-Aug-2017	822/275722-14	1-Aug-2018
Brüel & Kjær	2669	S/N 2148476	1-Aug-2017	683/281764-14	1-Aug-2018
HP	34401A	S/N US360980	1-Aug-2017	,205342	1-Aug-2018
Brüel & Kjær	2636	S/N 1323964	1-Aug-2017	822/275722-14	1-Aug-2018
HP	33120A	S/N US360458	1-Aug-2017	,205342	1-Aug-2018

Cal. Date: 30-Jan-2018 **Tested by: James Zhu**

Calibrated on WCCL system type 9700

SOH Wind Engineering LLC
141 Leroy Road · Williston, VT 05495 · USA
Tel 802.316.4368 · Fax 802.735.9106 · www.sohwind.com

CERTIFICATE FOR CALIBRATION OF SONIC ANEMOMETER

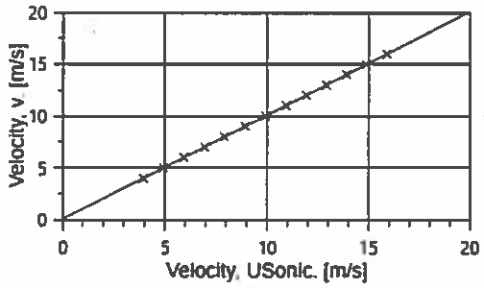
Certificate number: 17.US1.10370 **Date of issue:** November 16, 2017
Type: Vaisala Weather Transmitter, WXT520 **Serial number:** G4420002
Manufacturer: Vaisala, Oyj, Pl 26, FIN-00421 Helsinki, Finland
Client: Aercoustics Engineering Ltd., 1004 Middlegate RD, Suite 1100, S.Tower, Mississauga, ON L4Y 1M4, Canada

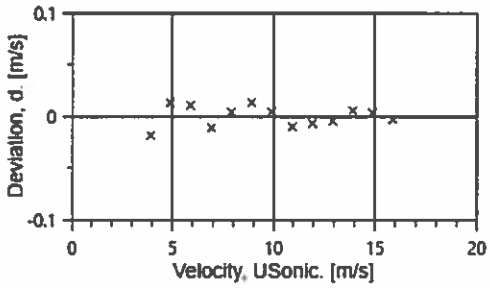
Anemometer received: November 15, 2017 **Anemometer calibrated:** November 15, 2017
Calibrated by: MEJ **Procedure:** MEASNET, IEC 61400-12-1:2017 Annex F
Certificate prepared by: EJF **Approved by:** Calibration engineer, EJF

Calibration equation obtained: $v\,[m/s] = 1.00118 \cdot f\,[m/s] + 0.06286$

Standard uncertainty, slope: 0.00077 **Standard uncertainty, offset:** 0.13048
Covariance: -0.0000059 $(m/s)^2/m/s$ **Coefficient of correlation:** $\rho = 0.999997$
Absolute maximum deviation: -0.019 m/s at 3.969 m/s
Barometric pressure: 1011.5 hPa **Relative humidity:** 21.9%

Succession	Velocity pressure, q. [Pa]	Temperature in wind tunnel [°C]	Temperature in d.p. box [°C]	Wind velocity, v. [m/s]	Anemometer Output, f. [m/s]	Deviation, d. [m/s]	Uncertainty u_c (k=2) [m/s]
2	9.39	22.0	26.0	3.969	3.9200	-0.019	0.024
4	14.85	22.0	26.0	4.992	4.9103	0.013	0.025
6	21.38	22.0	26.0	5.990	5.9100	0.011	0.027
8	29.13	22.1	26.0	6.993	6.9333	-0.011	0.029
10	38.09	22.1	26.0	7.996	7.9200	0.004	0.032
12	48.35	22.1	26.0	9.010	8.9233	0.013	0.035
13-last	59.50	22.1	26.0	9.996	9.9172	0.004	0.038
11	72.14	22.0	26.0	11.006	10.9400	-0.010	0.041
9	85.76	22.0	26.0	12.000	11.9300	-0.007	0.044
7	100.55	22.0	26.0	12.993	12.9200	-0.005	0.047
5	116.73	22.0	26.0	14.000	13.9150	0.006	0.050
3	133.56	22.0	26.0	14.974	14.8900	0.004	0.053
1-first	152.12	21.9	26.0	15.979	15.9000	-0.003	0.057





AC-1746

EQUIPMENT USED

Serial Number	Description
Njord1	Wind tunnel, blockage factor = 1.0035
2254	Control cup anemometer
-	Mounting tube, D = 19 mm
TT003	Summit Electronics, 1XPT100, 0-10V Output, wind tunnel temp.
TP001	PR Electronics 5102, 0-10V Output, differential pressure box temp.
DP004	Setra Model 239, 0-1inWC, differential pressure transducer
HY002	Dwyer RHP-2D20, 0-10V Output, humidity transmitter
BP001	Setra Model 278, barometer
PL8	Pitot tube
XB002	Computer Board. 16 bit A/D data acquisition board
9PRZRW1	PC dedicated to data acquisition

Traceable calibrations of the equipment are carried out by external accredited institutions: Atlantic Scale, Essco Calibration Labs & Furness Controls. A real-time analysis module within the data acquisition software detects pulse frequency.

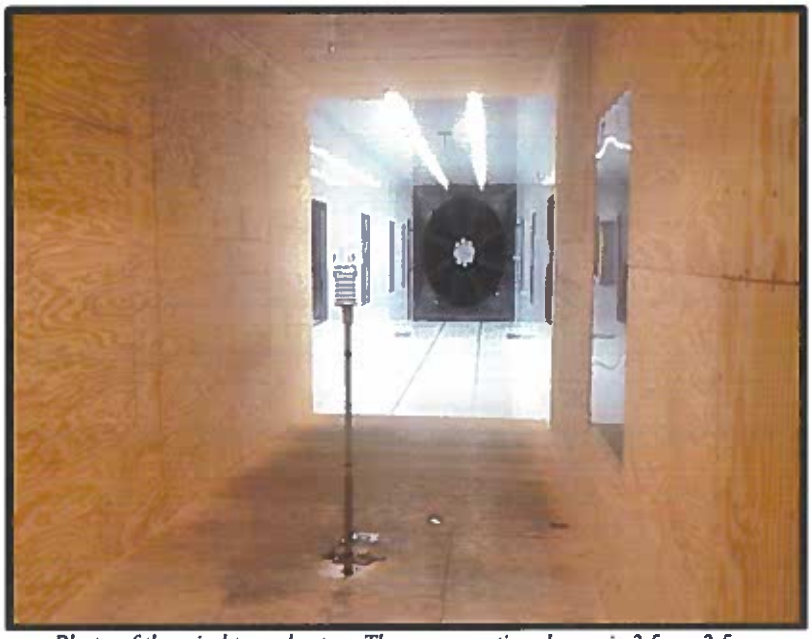


Photo of the wind tunnel setup. The cross-sectional area is 2.5m x 2.5m.

UNCERTAINTIES

The documented uncertainty is the total combined uncertainty at 95% confidence level (k=2) in accordance with EA-4/02. The uncertainty at 10 m/s comply with the requirements in the IEC 61400-12-1:2005 procedure. See Document US.12.01.004 for further details.

COMMENTS

This sensor was calibrated at 0° for this certificate.

Certificate number: 17.US1.10370

SOH Wind Engineering LLC
141 Leroy Road · Williston, VT 05495 · USA
Tel 802.316.4368 · Fax 802.735.9106 · www.sohwind.com

CERTIFICATE FOR CALIBRATION OF SONIC ANEMOMETER

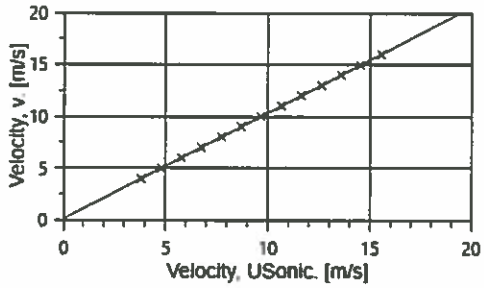
Certificate number: 17.US1.10369 **Date of issue:** November 16, 2017
Type: Vaisala Weather Transmitter, WXT520 **Serial number:** G4420002
Manufacturer: Vaisala, Oyj, Pl 26, FIN-00421 Helsinki, Finland
Client: Aercoustics Engineering Ltd., 1004 Middlegate RD, Suite 1100, S.Tower, Mississauga, ON L4Y 1M4, Canada

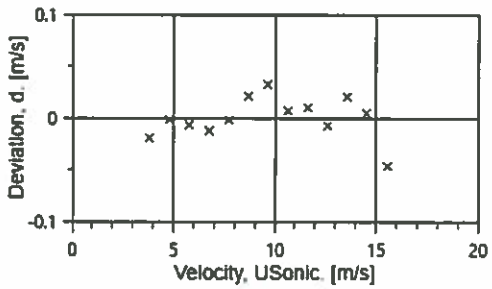
Anemometer received: November 15, 2017 **Anemometer calibrated:** November 15, 2017
Calibrated by: MEJ **Procedure:** MEASNET, IEC 61400-12-1:2017 Annex F
Certificate prepared by: EJF **Approved by:** Calibration engineer, EJF

Calibration equation obtained: v [m/s] = 1.02399 · f [m/s] + 0.09265

Standard uncertainty, slope: 0.00156 **Standard uncertainty, offset:** 0.17838
Covariance: -0.0000247 (m/s)²/m/s **Coefficient of correlation:** ρ = 0.999987
Absolute maximum deviation: -0.046 m/s at 15.979 m/s
Barometric pressure: 1011.1 hPa **Relative humidity:** 22.0%

Succession	Velocity pressure, q. [Pa]	Temperature in wind tunnel [°C]	d.p. box [°C]	Wind velocity, v. [m/s]	Anemometer Output, f. [m/s]	Deviation, d. [m/s]	Uncertainty u_c (k=2) [m/s]
2	9.41	22.0	26.0	3.975	3.8100	-0.019	0.024
4	14.86	22.0	26.0	4.996	4.7897	-0.002	0.025
6	21.40	22.1	26.0	5.994	5.7700	-0.007	0.027
8	29.14	22.1	26.0	6.996	6.7533	-0.012	0.029
10	38.16	22.1	26.0	8.006	7.7300	-0.002	0.032
12	48.35	22.1	26.0	9.012	8.6900	0.021	0.035
13-last	59.54	22.1	26.0	10.001	9.6448	0.032	0.038
11	72.13	22.1	26.0	11.009	10.6533	0.007	0.041
9	85.87	22.1	26.0	12.012	11.6300	0.010	0.044
7	100.56	22.1	26.0	12.998	12.6100	-0.008	0.047
5	116.94	22.0	26.0	14.015	13.5767	0.020	0.050
3	133.53	22.0	26.0	14.976	14.5300	0.005	0.053
1-first	152.03	22.0	26.0	15.979	15.5600	-0.046	0.057





AC-1746

EQUIPMENT USED

Serial Number	Description
Njord1	Wind tunnel, blockage factor = 1.0035
2254	Control cup anemometer
-	Mounting tube, D = 19 mm
TT003	Summit Electronics, 1XPT100, 0-10V Output, wind tunnel temp.
TP001	PR Electronics 5102, 0-10V Output, differential pressure box temp.
DP004	Setra Model 239, 0-1inWC, differential pressure transducer
HY002	Dwyer RHP-2D20, 0-10V Output, humidity transmitter
BP001	Setra Model 278, barometer
PL8	Pitot tube
XB002	Computer Board. 16 bit A/D data acquisition board
9PRZRW1	PC dedicated to data acquisition

Traceable calibrations of the equipment are carried out by external accredited institutions: Atlantic Scale, Essco Calibration Labs & Furness Controls. A real-time analysis module within the data acquisition software detects pulse frequency.

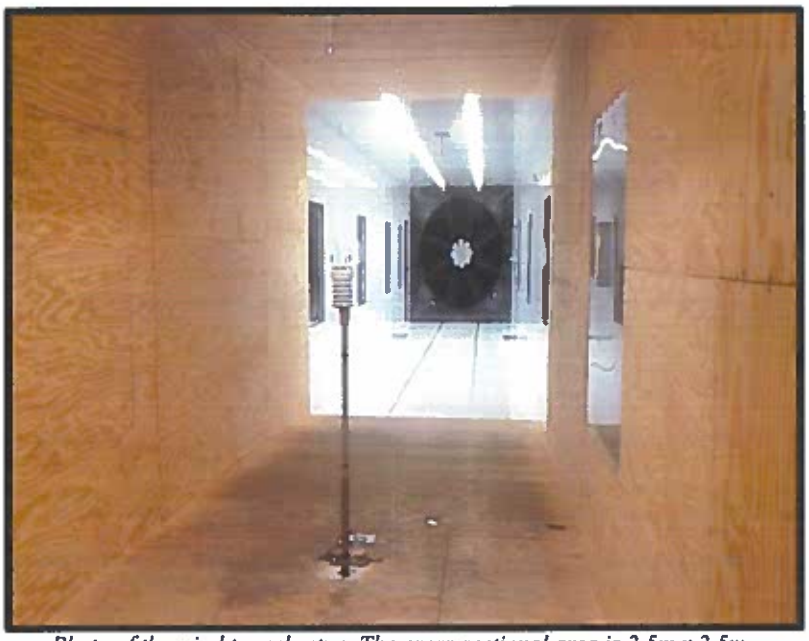


Photo of the wind tunnel setup. The cross-sectional area is 2.5m x 2.5m.

UNCERTAINTIES

The documented uncertainty is the total combined uncertainty at 95% confidence level (k=2) in accordance with EA-4/02. The uncertainty at 10 m/s comply with the requirements in the IEC 61400-12-1:2005 procedure. See Document US.12.01.004 for further details.

COMMENTS

This sensor was calibrated at 90° for this certificate.

Certificate number: 17.US1.10369

TRANSCAT CANADA
Trust in every measure

CERTIFICATE OF CALIBRATION

Customer: AEROCOUSTICS ENGINEERING LTD
1004 MIDDLEGATE ROAD
SUITE 1100
MISSISSAUGA, ON L4Y 1M4
PO Number: TR2018.02.14

SCC Accredited LAB — LAB Accrédité CCN
SCC Lab No 827

CLAS NRC·CNRC CLAS CLAS 2016-02

ilac-MRA

Certificate/SO Number: 33-Q0W0C-20-1 Revision 0

Manufacturer: Nokeval
Model Number: 7470
Description: Serial to Analog Converter
Serial Number: A159784
ID: NONE

As-Found: In Tolerance
As-Left: In Tolerance

Calibration Date: Feb 20, 2018
Due Date: Feb 20, 2020

Calibrated To: Manufacturer Specification
Calibration Procedure: 1-AC58014-0

Transcat Calibration Laboratories have been audited and found in compliance with ISO/IEC 17025:2005. Accredited calibrations performed within the Lab's Scope of Accreditation are indicated by the presence of the Accrediting Body's Logo and Certificate Number. Any measurements on an accredited calibration not covered by that Lab's Scope of Accreditation are listed in the notes section of the certificate. SCC, NRC, CLAS or ANAB do not guarantee the accuracy of an individual calibration by accredited laboratories.

Transcat calibrations, as applicable, are performed in compliance with the requirements of the Transcat Quality Manual QAC-P01-000 Revision 1.0, the customer's Purchase Order and/or Quality Agreement requirements, ISO 9001:2008, ANSI/NCSL Z540.1-1994 (R2002). Complete records of work performed are maintained by Transcat and are available for inspection. Laboratory standards used in the performance of this calibration are listed below.

Transcat documents the traceability of measurements to the SI units through the National Institute of Standards and Technology (NIST), or the National Research Council of Canada (NRC), or other national measurement institutes (NMI) that are signatories to the CIPM Mutual Recognition Arrangement, or accepted fundamental and/or natural physical constants, or by the use of specified methods, consensus standards or ratio type measurements. Documentation supporting traceability information is available for review upon written request at a Transcat facility. The measured quantity and the measurement uncertainty are required for further dissemination of traceability.

Uncertainties are reported with a coverage factor k=2, providing a level of confidence of approximately 95%. All calibrations have been performed using processes having a TUR of 4:1 or better (3:1 for mass calibrations), unless otherwise noted. The Test Uncertainty Ratio (TUR) is calculated in accordance with NCSL International RP-18. For mass calibrations: Conventional mass referenced to 8.0 g/cm³.

The results in this report relate only to the item calibrated or tested. Recorded calibration data is valid at the time of calibration within the stated uncertainties at the environmental conditions noted. The determination of compliance to the specification is specific to the model/serial no./ID no. referenced above based on the tolerances shown; these tolerances are either the original equipment manufacturers (OEM's) warranted specifications or the client's requested specifications. This certificate may not be reproduced except in full, without the written approval of Transcat. Additional information, if applicable may be included on separate report(s).

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Certificate/SO Number: 33-Q0W0C-20-1 Revision 0

As Found/As Left Data

Description	Setpoints	Accuracy	Low Limit	High Limit	As Found / As Left	OOT	Cal Process Uncertainty (k=2; ±)	Measurement Uncertainty (k=2; ±)	Units	TUR
DC Current % Source - 4-20mA Ch #1										
4 - 20mA	0%	±(0.1% Span)	3.984	4.016	3.996 mA		1.6e-004	1.9e-003	mA	100.0 : 1
	25%	±(0.1% Span)	7.984	8.016	7.995 mA		2.7e-004	1.9e-003	mA	59.3 : 1
	50%	±(0.1% Span)	11.984	12.016	12.000 mA		1.1e-003	2.2e-003	mA	14.5 : 1
	75%	±(0.1% Span)	15.984	16.016	15.999 mA		1.3e-003	2.3e-003	mA	12.3 : 1
	100%	±(0.1% Span)	19.984	20.016	19.998 mA		1.4e-003	2.3e-003	mA	11.4 : 1
DC Current % Source - 4-20mA Ch #2										
4 - 20mA	0%	±(0.1% Span)	3.984	4.016	3.996 mA		1.6e-004	1.9e-003	mA	100.0 : 1
	25%	±(0.1% Span)	7.984	8.016	7.999 mA		2.7e-004	1.9e-003	mA	59.3 : 1
	50%	±(0.1% Span)	11.984	12.016	11.997 mA		1.1e-003	2.2e-003	mA	14.5 : 1
	75%	±(0.1% Span)	15.984	16.016	16.002 mA		1.3e-003	2.3e-003	mA	12.3 : 1
	100%	±(0.1% Span)	19.984	20.016	19.999 mA		1.4e-003	2.3e-003	mA	11.4 : 1
DC Current % Source - 4-20mA Ch #3										
4 - 20mA	0%	±(0.1% Span)	3.984	4.016	3.996 mA		1.6e-004	1.9e-003	mA	100.0 : 1
	25%	±(0.1% Span)	7.984	8.016	7.996 mA		2.7e-004	1.9e-003	mA	59.3 : 1
	50%	±(0.1% Span)	11.984	12.016	11.996 mA		1.1e-003	2.2e-003	mA	14.5 : 1
	75%	±(0.1% Span)	15.984	16.016	16.002 mA		1.3e-003	2.3e-003	mA	12.3 : 1
	100%	±(0.1% Span)	19.984	20.016	20.002 mA		1.4e-003	2.3e-003	mA	11.4 : 1
DC Current % Source - 4-20mA Ch #4										
4 - 20mA	0%	±(0.1% Span)	3.984	4.016	3.997 mA		1.6e-004	1.9e-003	mA	100.0 : 1
	25%	±(0.1% Span)	7.984	8.016	7.995 mA		2.7e-004	1.9e-003	mA	59.3 : 1
	50%	±(0.1% Span)	11.984	12.016	11.999 mA		1.1e-003	2.2e-003	mA	14.5 : 1
	75%	±(0.1% Span)	15.984	16.016	15.997 mA		1.3e-003	2.3e-003	mA	12.3 : 1
	100%	±(0.1% Span)	19.984	20.016	20.001 mA		1.4e-003	2.3e-003	mA	11.4 : 1

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As Found/As Left Data

Description	Setpoints	Accuracy	Low Limit	High Limit	As Found / As Left	OOT	Cal Process Uncertainty (k=2; ±)	Measurement Uncertainty (k=2; ±)	Units	TUR
DC Current % Source - 0-20mA Ch #1										
0 - 20mA	0%	±(0.1% Span)	-0.020	0.020	0.000 mA		9.2e-007	2.3e-003	mA	100.0 : 1
	25%	±(0.1% Span)	4.980	5.020	4.997 mA		1.9e-004	2.3e-003	mA	100.0 : 1
	50%	±(0.1% Span)	9.980	10.020	9.997 mA		3.2e-004	2.3e-003	mA	62.5 : 1
	75%	±(0.1% Span)	14.980	15.020	14.998 mA		1.2e-003	2.6e-003	mA	16.7 : 1
	100%	±(0.1% Span)	19.980	20.020	19.998 mA		1.4e-003	2.7e-003	mA	14.3 : 1
DC Current % Source - 0-20mA Ch #2										
0 - 20mA	0%	±(0.1% Span)	-0.020	0.020	0.002 mA		9.2e-007	2.3e-003	mA	100.0 : 1
	25%	±(0.1% Span)	4.980	5.020	4.996 mA		1.9e-004	2.3e-003	mA	100.0 : 1
	50%	±(0.1% Span)	9.980	10.020	10.000 mA		3.2e-004	2.3e-003	mA	62.5 : 1
	75%	±(0.1% Span)	14.980	15.020	15.000 mA		1.2e-003	2.6e-003	mA	16.7 : 1
	100%	±(0.1% Span)	19.980	20.020	19.999 mA		1.4e-003	2.7e-003	mA	14.3 : 1
DC Current % Source - 0-20mA Ch #3										
0 - 20mA	0%	±(0.1% Span)	-0.020	0.020	0.001 mA		9.2e-007	2.3e-003	mA	100.0 : 1
	25%	±(0.1% Span)	4.980	5.020	4.996 mA		1.9e-004	2.3e-003	mA	100.0 : 1
	50%	±(0.1% Span)	9.980	10.020	9.996 mA		3.2e-004	2.3e-003	mA	62.5 : 1
	75%	±(0.1% Span)	14.980	15.020	14.996 mA		1.2e-003	2.6e-003	mA	16.7 : 1
	100%	±(0.1% Span)	19.980	20.020	20.001 mA		1.4e-003	2.7e-003	mA	14.3 : 1
DC Current % Source - 0-20mA Ch #4										
0 - 20mA	0%	±(0.1% Span)	-0.020	0.020	0.001 mA		9.2e-007	2.3e-003	mA	100.0 : 1
	25%	±(0.1% Span)	4.980	5.020	4.992 mA		1.9e-004	2.3e-003	mA	100.0 : 1
	50%	±(0.1% Span)	9.980	10.020	9.997 mA		3.2e-004	2.3e-003	mA	62.5 : 1
	75%	±(0.1% Span)	14.980	15.020	14.996 mA		1.2e-003	2.6e-003	mA	16.7 : 1
	100%	±(0.1% Span)	19.980	20.020	20.001 mA		1.4e-003	2.7e-003	mA	14.3 : 1

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Description	Setpoints	Accuracy	Low Limit	High Limit	As Found / As Left	OOT	Cal Process Uncertainty (k=2; ±)	Measurement Uncertainty (k=2; ±)	Units	TUR
DC Voltage % Source - 0-5V Ch#1										
0 -5V	0%	±(0.1% Span)	-0.0050	0.0050	0.0009 V		5.0e-007	5.8e-004	V	100.0 : 1
	20%	±(0.1% Span)	0.9950	1.0050	1.0010 V		5.5e-006	5.8e-004	V	100.0 : 1
	40%	±(0.1% Span)	1.9950	2.0050	2.0001 V		1.1e-005	5.8e-004	V	100.0 : 1
	60%	±(0.1% Span)	2.9950	3.0050	2.9984 V		1.6e-005	5.8e-004	V	100.0 : 1
	80%	±(0.1% Span)	3.9950	4.0050	4.0001 V		2.1e-005	5.8e-004	V	100.0 : 1
	100%	±(0.1% Span)	4.9950	5.0050	4.9988 V		2.6e-005	5.8e-004	V	100.0 : 1
DC Voltage % Source - 0-5V Ch#2										
0 -5V	0%	±(0.1% Span)	-0.0050	0.0050	0.0002 V		5.0e-007	5.8e-004	V	100.0 : 1
	20%	±(0.1% Span)	0.9950	1.0050	1.0000 V		5.5e-006	5.8e-004	V	100.0 : 1
	40%	±(0.1% Span)	1.9950	2.0050	2.0010 V		1.1e-005	5.8e-004	V	100.0 : 1
	60%	±(0.1% Span)	2.9950	3.0050	2.9990 V		1.6e-005	5.8e-004	V	100.0 : 1
	80%	±(0.1% Span)	3.9950	4.0050	3.9980 V		2.1e-005	5.8e-004	V	100.0 : 1
	100%	±(0.1% Span)	4.9950	5.0050	5.0000 V		2.6e-005	5.8e-004	V	100.0 : 1
DC Voltage % Source - 0-5V Ch#3										
0 -5V	0%	±(0.1% Span)	-0.0050	0.0050	0.0001 V		5.0e-007	5.8e-004	V	100.0 : 1
	20%	±(0.1% Span)	0.9950	1.0050	0.9995 V		5.5e-006	5.8e-004	V	100.0 : 1
	40%	±(0.1% Span)	1.9950	2.0050	1.9991 V		1.1e-005	5.8e-004	V	100.0 : 1
	60%	±(0.1% Span)	2.9950	3.0050	2.9982 V		1.6e-005	5.8e-004	V	100.0 : 1
	80%	±(0.1% Span)	3.9950	4.0050	4.0008 V		2.1e-005	5.8e-004	V	100.0 : 1
	100%	±(0.1% Span)	4.9950	5.0050	5.0015 V		2.6e-005	5.8e-004	V	100.0 : 1

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Description	Setpoints	Accuracy	Low Limit	High Limit	As Found / As Left	OOT	Cal Process Uncertainty (k=2; ±)	Measurement Uncertainty (k=2; ±)	Units	TUR
DC Voltage % Source - 0-5V Ch#4										
0 -5V	0%	±(0.1% Span)	-0.0050	0.0050	0.0001 V		5.0e-007	5.8e-004	V	100.0 : 1
	20%	±(0.1% Span)	0.9950	1.0050	1.0006 V		5.5e-006	5.8e-004	V	100.0 : 1
	40%	±(0.1% Span)	1.9950	2.0050	1.9991 V		1.1e-005	5.8e-004	V	100.0 : 1
	60%	±(0.1% Span)	2.9950	3.0050	2.9999 V		1.6e-005	5.8e-004	V	100.0 : 1
	80%	±(0.1% Span)	3.9950	4.0050	3.9984 V		2.1e-005	5.8e-004	V	100.0 : 1
	100%	±(0.1% Span)	4.9950	5.0050	4.9996 V		2.6e-005	5.8e-004	V	100.0 : 1
DC Voltage % Source - 0-10V Ch#1										
0 - 10V	0%	±(0.1% Span)	-0.010	0.010	0.001 V		5.0e-007	1.2e-003	V	100.0 : 1
	20%	±(0.1% Span)	1.990	2.010	2.000 V		1.1e-005	1.2e-003	V	100.0 : 1
	40%	±(0.1% Span)	3.990	4.010	4.000 V		2.1e-005	1.2e-003	V	100.0 : 1
	60%	±(0.1% Span)	5.990	6.010	6.000 V		3.1e-005	1.2e-003	V	100.0 : 1
	80%	±(0.1% Span)	7.990	8.010	7.997 V		4.1e-005	1.2e-003	V	100.0 : 1
	100%	±(0.1% Span)	9.990	10.010	9.997 V		5.2e-005	1.2e-003	V	100.0 : 1
DC Voltage % Source - 0-10V Ch#2										
0 - 10V	0%	±(0.1% Span)	-0.010	0.010	0.002 V		5.0e-007	1.2e-003	V	100.0 : 1
	20%	±(0.1% Span)	1.990	2.010	2.001 V		1.1e-005	1.2e-003	V	100.0 : 1
	40%	±(0.1% Span)	3.990	4.010	3.998 V		2.1e-005	1.2e-003	V	100.0 : 1
	60%	±(0.1% Span)	5.990	6.010	5.998 V		3.1e-005	1.2e-003	V	100.0 : 1
	80%	±(0.1% Span)	7.990	8.010	7.998 V		4.1e-005	1.2e-003	V	100.0 : 1
	100%	±(0.1% Span)	9.990	10.010	9.997 V		5.2e-005	1.2e-003	V	100.0 : 1

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As Found/As Left Data

Description	Setpoints	Accuracy	Low Limit	High Limit	As Found / As Left	OOT	Cal Process Uncertainty (k=2; ±)	Measurement Uncertainty (k=2; ±)	Units	TUR
DC Voltage % Source - 0-10V Ch#3										
0 - 10V	0%	±(0.1% Span)	-0.010	0.010	0.000 V		5.0e-007	1.2e-003	V	100.0 : 1
	20%	±(0.1% Span)	1.990	2.010	1.999 V		1.1e-005	1.2e-003	V	100.0 : 1
	40%	±(0.1% Span)	3.990	4.010	4.001 V		2.1e-005	1.2e-003	V	100.0 : 1
	60%	±(0.1% Span)	5.990	6.010	6.000 V		3.1e-005	1.2e-003	V	100.0 : 1
	80%	±(0.1% Span)	7.990	8.010	7.999 V		4.1e-005	1.2e-003	V	100.0 : 1
	100%	±(0.1% Span)	9.990	10.010	9.998 V		5.2e-005	1.2e-003	V	100.0 : 1
DC Voltage % Source - 0-10V Ch#4										
0 - 10V	0%	±(0.1% Span)	-0.010	0.010	0.001 V		5.0e-007	1.2e-003	V	100.0 : 1
	20%	±(0.1% Span)	1.990	2.010	1.999 V		1.1e-005	1.2e-003	V	100.0 : 1
	40%	±(0.1% Span)	3.990	4.010	3.998 V		2.1e-005	1.2e-003	V	100.0 : 1
	60%	±(0.1% Span)	5.990	6.010	6.000 V		3.1e-005	1.2e-003	V	100.0 : 1
	80%	±(0.1% Span)	7.990	8.010	8.000 V		4.1e-005	1.2e-003	V	100.0 : 1
	100%	±(0.1% Span)	9.990	10.010	9.998 V		5.2e-005	1.2e-003	V	100.0 : 1

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PO Number: TR2018.02.14

Certificate/SO Number: 33-Q0W0C-20-1 Revision 0

Traceable Standards

Asset	Manufacturer	Model Number	Description	Cal Date	Due Date	Traceability Number	Use
N0150	Fluke Corporation	5700A	Calibrator	23-Jun-17	31-May-18	5-&N0150-14-1	AF
N0436	Agilent Technologies	3458A Opt 002	Digital Multimeter, 8.5 Digit	19-Apr-17	30-Apr-18	5-&N0436-14-1	AF/AL

The use of the standard is defined as: AF - used for as-found readings, AL - used for as-left readings.

Environmental Data

Temperature	Relative Humidity	Temp / RH Asset
71.35°F /21.86°C	33.50%	N0457

Calibrated At:
4043 Carling Avenue
Ottawa, ON K2K 2A4

Facility Responsible:
4043 Carling Avenue
Ottawa, ON K2K 2A4
800-828-1470

Calibrated By:
Electronically Signed By:
Mark King

Mark King	Feb 20, 2018
Calibration Technician	15:08:17 -05:00

Reviewed By:
Electronically Signed By:
Francis Kane

Francis Kane	Feb 20, 2018
Lab Manager	15:24:41 -05:00

Unit Barcode: 901B0150195

Date Received: February 15, 2018
Service Level : R9

Customer Number: 9-322110-000

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Appendix F.02
Summary of Measurement Results

Summary of Measurement Results

1.1 Sound Power Levels

From Table 12 of IEC test report 17283.01.T36.RP2:

Wind Speed (m/s)	Apparent L_{WA}, (dBA)	Maximum Sound Power Level (dBA)* REA # 5272-A9FHRL
7.5	101.4	104.5
8	102.9	104.5
8.5	103.3	104.5
9	103.3	104.5
9.5	103.2	104.5
10	103.1	104.5
10.5	103.0	104.5
11	102.6	104.5
11.5	102.4	104.5
12	102.4	104.5
12.5	102.1	104.5

*Includes +0.5 dB, per Section E3.1 of the MECP Compliance Protocol for Wind Turbine Noise

1.2 Tonal Audibility Values

From Table 14 of IEC test report 17238.01.T36.RP2:

Wind Speed (m/s)	Frequency (Hz)	Tonal audibility, ΔL_a (dB)	Tonal Audibility from AAR* (dB)
7.5	64	-2.7	3
8	71	0.0	
8.5	70	0.1	
9	70	0.8	
9.5	70	0.3	
10	68	-1.2	
10.5	66	-1.8	
11	66	-2.2	

*North Kent Wind Project Noise Impact Assessment Report (May 9, 2016)

1.3 Statement of Compliance

Based on the results in Table 12 of the IEC 61400-11 test report to which this statement is attached, the maximum apparent sound power level of the test turbine complies with the sound level in REA # 5272-A9FHRL and Section E3.1 of the MECP Compliance Protocol for Wind Turbine Noise.

Based on the results in Table 14 of the IEC 61400-11 to which this statement is attached, the tonal audibility of the test turbine complies with the maximum tonal audibility of 3 dB as indicated in the statement from the manufacturer dated July 15, 2015, found in Appendix E of the Noise Impact Assessment Report dated May 9, 2016.

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Appendix F.03
E-Audit Checklist

Appendix F.03 - (2017 Compliance Protocol Appendix F6): E-Audit checklist for IEC 61400-11:2013

Wind Energy Project – Screening Document – Acoustic Audit Report – Emission IEC61400-11:2013 Standard

Information Required in the Acoustic Audit Report – Emission

Item #	Description	Complete?	Comment
1	Characterization of the wind turbine Items 1 to 26; IEC61400-11:2013, Section 10.2	✓	Report Section 2.1
2	Physical environment Items 27 to 33; IEC61400-11:2013, Section 10.3, Physical Environment	✓	Report Section 2.2, 3.2, 4.2, Appendix A
3	Measurement instrumentation Items 34 to 39; IEC61400-11:2013, Section 10.4, Instrumentation	✓	Report Section 3, Appendix F.01
4	Acoustic data Items 40 to 52; IEC61400-11:2013, Section 10.5, Acoustic Data	✓	Report Section 4, 3.3, Appendix C, Appendix D,
5	Non-acoustic data Items 50 to 53, and 56; IEC61400-11:2003 Section 10.6, Non-Acoustic Data Items 59 and 60; NPC-233, Section 12.3, Acoustic Audit – Acoustical Data, bullet point number 8, All necessary and supporting calculations	✓	Report Section 3, Appendix E
6	Uncertainty the apparent sound power level at integer wind speeds one-third octave band spectrum of the noise at the reference position at each integer wind speed the Tonality of the sound emissions of the wind turbine measured at the reference position	✓	Report Section 4, Appendix C
7	Additional information Item 60; NPC-233, Section 10, Report Format, bullet point number 4, Conclusions and Recommendations Item 61; NPC-233, Section 12.3, Acoustic Audit – Acoustical Data, bullet point number 8, All necessary and supporting calculations Item 62; NPC-233, Section 12.3, Acoustic Audit – Acoustical Data, bullet point number 3, Details of measurement procedure	✓	Report Section 3, Appendix F, data in Excel provided separately
8	Items 68 to 72; IEC61400-11:2013, Section 10.5, Acoustic Data	⦸	Optional information, not provided in this report
9	Non-acoustic data Items 73 to 74 are from IEC61400-11:2013, Section 10.6, Non-Acoustic Data	⦸	Optional information, not provided in this report

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End of Report