



ACOUSTIC
CONSULTANTS

**PROPOSED RESIDENTIAL DEVELOPMENT,
EDGE LANE, OPENSHAW
AMBIENT NOISE & BUILDING ENVELOPE
ASSESSMENT**

architectural

environmental

occupational

industrial

noise control at source

project management

planning

legal services

expert witness

Report Prepared For:

Complete Sustainable Solutions Ltd
Email: matthew@completesustainability.co.uk

Report Prepared By:

Mr C. Wright
PDA Ltd.
3 Bridgewater Court
Barsbank Lane
Lymm
Cheshire
WA13 0ER

Philip Dunbavin Acoustics Ltd.

3 Bridgewater Court – Barsbank Lane – Lymm Cheshire - WA13 0ER

Tel: 01925 759380 · www.pdaltd.com

Directors: P. R. Dunbavin • J. A. Dunbavin • M. de Salis • E. Evenden • R. Grant

Registered Number 2302847 England

*Registered Office: 3 Bridgewater Court · Barsbank Lane · Lymm · WA13 0ER



Document Control

Revision	1	2	3	4
Remark	First issue	Alternative ventilation strategy included	Revised in accordance with most recent site layout	
Date	29/10/2019	4/12/19	11/10/2022	
Report prepared by	Chris Wright BSc (Hons), AMIOA	Chris Wright BSc (Hons), AMIOA	Chris Wright BSc (Hons), MIOA	
Position	Senior Technician	Senior Technician	Acoustic Consultant	
Report checked by	Liam Kavaney AMIOA	Chris Lalley MSc MIOA	Chris Lalley MSc MIOA	
Position	Consultant	Senior Consultant	Senior Consultant	

Contents

1.0	SUMMARY	4
2.0	SITE DESCRIPTION.....	5
3.0	ASSESSMENT CRITERIA	6
3.1	National Planning Policy Framework	6
3.2	Planning Practice Guidance – Noise	7
3.3	BS8233:2014 Guidance on Sound Insulation and Noise Reduction for Buildings	8
3.4	WHO Guidelines for Community Noise	8
4.0	SURVEY DETAILS & RESULTS.....	9
4.1	Description of Noise Sources	10
4.2	Measured Noise Results	10
5.0	NOISE BREAK IN CALCULATIONS AND MITIGATION.....	11
5.1	Noise Modelling	11
5.2	Calculations	12
5.3	Design Assumptions	12
5.3.1	Walls	12
5.3.2	Room Dimensions	12
5.4	Mitigation Strategies	13
5.5	Further Details on Glazing & Ventilators.....	15
5.6	Break-in Noise Calculations Results	16
6.0	ALTERNATIVE VENTILATION STRATEGY.....	16
7.0	NOISE LEVELS IN EXTERNAL AMENITY AREAS.....	17
8.0	CDM 2015.....	18
9.0	CONCLUSION	18

1.0 SUMMARY

PDA Ltd was commissioned by Complete Sustainability Solutions Ltd to carry out an environmental noise assessment for the proposed residential development on the former Openshaw Industrial Estate site off Edge Lane in Openshaw, Manchester, M11 1DG.

The surrounding area is comprised largely of existing residential dwellings and local amenities. The Lime Square retail park is located immediately to the south of the site. A number of industrial units are located to the north of the site these include Bradford Garage and AMP Waste Management. The site is bound by Edge Lane to the north and east, and Fairfield Road to the south. The proposal is to develop the site for residential use, comprising a mixture of houses and flats to form 222 plots in total.

In order to quantify the noise emissions from the various sources surrounding the site a noise level survey was undertaken in the vicinity of the site. Long term measurements were taken from three positions, one at the northern boundary looking onto Edge Lane and Bradford Garage, another at the eastern boundary along Fairfield Road and another at the southern boundary looking onto Lime Square Retail Park.

Recommendations are given in this report for the glazing, ventilation and building façade elements that will be required to achieve the internal noise level requirements. Our calculations suggest that the criteria of BS8233:2014 and WHO Guidelines can be achieved both within the dwellings and in the external amenity areas. Therefore, in-line with the National Planning Policy Framework on the grounds of noise we would deem this site suitable for residential development.

2.0 SITE DESCRIPTION

The site is located on the former Openshaw Industrial Estate site off Edge Lane in Openshaw, Manchester, M11 1DG. The surrounding area is comprised largely of existing residential dwellings and local amenities. The Lime Square retail park is located immediately to the south of the site. A number of industrial units are located to the north of the site these include Bradford Garage and AMP Waste Management. The site is bound by Edge Lane to the north and east, and Fairfield Road to the south. The proposal is to develop the site for residential use, comprising a mixture of houses and flats to form 224 plots in total.

An indicative site location can be seen in Figure 1 below:

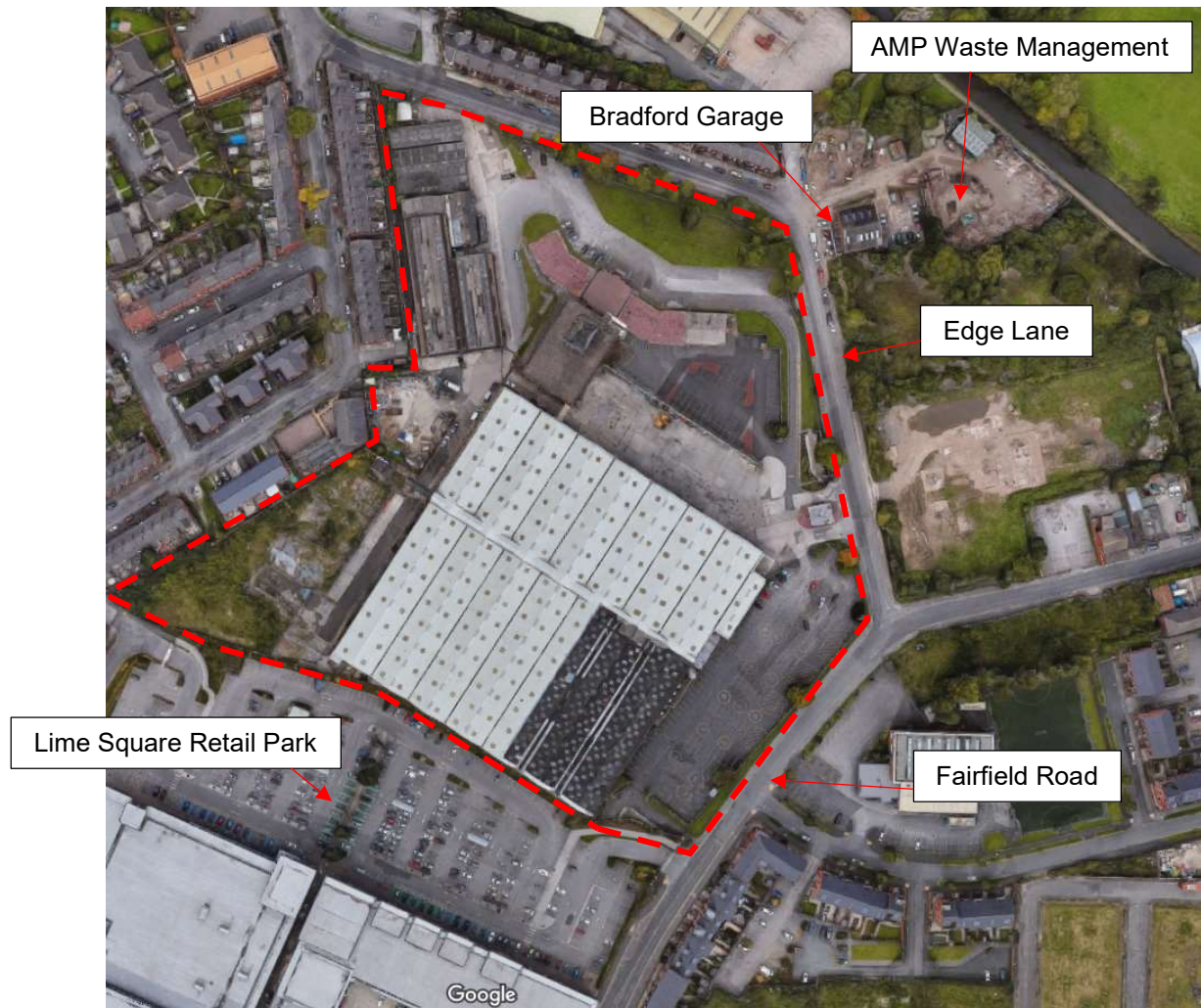


Figure 1 – Site location

3.0 ASSESSMENT CRITERIA

3.1 National Planning Policy Framework

National Planning Policy is guided by the National Planning Policy Framework (NPPF) updated in February 2018. With regard to Noise the Framework states the following;

Planning policies and decisions should contribute to and enhance the natural and local environment by:

- *preventing new and existing development from contributing to, being put at unacceptable risk from, or being adversely affected by, unacceptable levels of soil, air, water or noise pollution or land instability.*

Planning policies and decisions should also ensure that new development is appropriate for its location taking into account the likely effects (including cumulative effects) of pollution on health, living conditions and the natural environment, as well as the potential sensitivity of the site or the wider area to impacts that could arise from the development. In doing so they should:

- *mitigate and reduce to a minimum potential adverse impacts resulting from noise from new development – and avoid noise giving rise to significant adverse impacts on health and the quality of life;*
- *identify and protect tranquil areas which have remained relatively undisturbed by noise and are prized for their recreational and amenity value for this reason.*

The terms 'significant adverse impact' and 'adverse impact' are defined in the explanatory notes of the 'Noise Policy Statement for England (NPSE)' which states;

There are two established concepts from toxicology that are currently being applied to noise impacts, for example, by the World Health Organisation. They are:

NOEL – No Observed Effect Level

This is the level below which no effect can be detected. In simple terms, below this level, there is no detectable effect on health and quality of life due to the noise.

LOAEL – Lowest Observed Adverse Effect Level

This is the level above which adverse effects on health and quality of life can be detected.

Extending these concepts for the purpose of this NPSE leads to the concept of a significant observed adverse effect level.

SOAEL – Significant Observed Adverse Effect Level

This is the level above which significant adverse effects on health and quality of life occur.

The notes also offer an explanation of the term 'other adverse impacts' as follows;

... refers to the situation where the impact lies somewhere between LOAEL and SOAEL. It requires that all reasonable steps should be taken to mitigate and minimise adverse effects on health and quality of life while also taking into account the guiding principles of sustainable development (paragraph 1.8). This does not mean that such adverse effects cannot occur.

Although no specific noise limits for LOAEL and SOAEL have been defined, in 2014 the UK Government published a planning practice guidance document for noise which indicates where these limits fall with relation to the perception of noise. A summary is reproduced in Section 3.2 below; the full document is published at <https://www.gov.uk/guidance/noise--2>.

3.2 Planning Practice Guidance – Noise

The UK Planning Practice Guidance on noise offers further guidance on the typical levels which constitute the NOEL, LOAEL and SOAEL and is reproduced in the table below;

Table 1: Planning Practice Noise Level Guidance

Perception	Examples of Outcomes	Increasing Effect Level	Action
Not Present	No Effect	No Observed Effect	No specific measures required
Present and not intrusive	Noise can be heard but does not cause any change in behaviour or attitude. Can slightly affect the acoustic character of the area but not such that there is a perceived change in the quality of life.	No Observed Adverse Effect	No specific measures required
		Lowest Observed Adverse Effect Level	
Present and intrusive	Noise can be heard and causes small changes in behaviour and/or attitude, e.g. turning up volume of television; speaking more loudly; where there is no alternative ventilation, having to close windows for some of the time because of the noise. Potential for some reported sleep disturbance. Affects the acoustic character of the area such that there is a perceived change in the quality of life.	Observed Adverse Effect	Mitigate and reduce to a minimum
		Significant Observed Adverse Effect Level	
Present and disruptive	The noise causes a material change in behaviour and/or attitude, e.g. avoiding certain activities during periods of intrusion; where there is no alternative ventilation, having to keep windows closed most of the time because of the noise. Potential for sleep disturbance resulting in difficulty in getting to sleep, premature awakening and difficulty in getting back to sleep. Quality of life diminished due to change in acoustic character of the area.	Significant Observed Adverse Effect	Avoid
Present and very disruptive	Extensive and regular changes in behaviour and/or an inability to mitigate effect of noise leading to psychological stress or physiological effects, e.g. regular sleep deprivation/awakening; loss of appetite, significant, medically definable harm, e.g. auditory and non-auditory	Unacceptable Adverse Effect	Prevent

3.3 BS8233:2014 Guidance on Sound Insulation and Noise Reduction for Buildings

British Standard 8233:2014, *Guidance on Sound Insulation and noise reduction for buildings*, gives guidance on internal noise levels within dwellings, flats and rooms in residential use when unoccupied. The following criteria are for Living and Dining Rooms for daytime use and Bedrooms for night time.

Table 1: BS8233 Recommended Indoor Ambient Noise Levels

Activity	Location	07:00 to 23:00	23:00 to 07:00
Resting	Living room	35 $L_{Aeq,16hour}$	–
Dining	Dining room/area	40 $L_{Aeq,16hour}$	–
Sleeping (daytime resting)	Bedrooms	35 $L_{Aeq,16hour}$	30 $L_{Aeq,8hour}$

It should however be stressed that the above criterion relates to steady noise, in this case from road traffic etc., excluding unusual noise events departing from the typical noise character of the area.

In addition, BS 8233 suggests, ‘*regular individual noise events (for example, scheduled aircraft or passing trains) can cause sleep disturbance. A guideline value may be set in terms of SEL or $L_{Amax,F}$, depending on the character and number of events per night. Sporadic noise events could require separate values*’.

As well as a criteria for acceptable internal noise levels BS 8233 also suggests that for private external spaces such as gardens or balconies, it is desirable that the noise level does not exceed 50db $L_{Aeq,T}$ with an upper limit of 55dB $L_{Aeq,T}$ during the daytime.

3.4 WHO Guidelines for Community Noise

In 1999, the WHO (World Health Organisation) published Guidelines for Community Noise, stating the following noise levels are applicable to residential dwellings.

Table 2: WHO Guidelines for Community Noise Criteria

Specific Environment	Critical Health Effect(s)	L_{Aeq} dB	Time Base (hours) *
Dwelling, indoors	Speech intelligibility & moderate annoyance, daytime & evening	35	16
Inside bedrooms	Sleep disturbance, night-time	30	8

* Typically taken to be daytime/evening - 07:00 – 23:00 hours and night time 23:00 – 07:00 hours.

The WHO guidelines state that, “*it is recommended that $L_{Aeq,T}$ be used to evaluate more-or-less continuous environmental noises. Where the noise is principally composed of a small number of discrete events, the additional use of L_{Amax} or SEL is recommended.*”

4.0 SURVEY DETAILS & RESULTS

In order to quantify the noise emissions from the various sources surrounding the site a noise level survey was undertaken in the vicinity of the site. Long term measurements were taken from three positions, one at the northern boundary looking onto Edge Lane and Bradford Garage, another at the eastern boundary along Fairfield Road and another to at the southern boundary looking onto Lime Square Retail Park.

Predominately the survey was undertaken over a period of approximately 65 hours between 13:50 hours on Friday 25th and 07:04 hours on Monday 26th October 2019. In addition further measurements were made to quantify the noise contributions from Fairfield Road between 14:00 hours on Friday 25th and 12:36 hours on Saturday 26th October 2019. At each measurement position it was ensured that there was a clear line of sight between the measurements position and the surrounding noise sources. All measurements were made and partially attended by Mr Chris Wright BSc (Hons) AMIOA of PDA Ltd. The measurement positions can be seen in Figure 2 below.



Figure 2 – Measurement positions

The survey was conducted using 3 NTi XL2 sound level meters. In accordance with IEC 61672-1:2002 the NTi XL2 has a class 1 frequency response and can operate as an integrating sound level meter with frequency analysis and statistical functions. The meters were set to measure 'A' weighted, broadband and octave band sound pressure levels and various statistical parameters. All meters were field calibrated to 1KHz at 94dB both before and after each measurement, in addition to this a valid calibration certificate is held for both the meters and the calibrators. The microphones were

mounted approximately 1.2m above ground level and were fitted with an all-weather windshield for the duration of the survey period.

A summary of the weather conditions during the survey periods is given in Table 3 below:

Table 3: Weather Conditions

Measurement Date	Temperature	Windspeed	Events
25 th October 2019	6 - 12°C	2 – 5 m/s	Rain
26 th October 2019	4 - 8°C	2 – 4 m/s	Rain
27 th October 2019	4 - 8°C	2 – 4 m/s	Light Rain

4.1 Description of Noise Sources

The local noise climate in the vicinity of the site was dominated by road traffic on Fairfield Road and Edge Lane. The road traffic included cars, motorbikes, buses and HGV's and occasional sirens due to passing emergency vehicles. HGV's were observed frequently on Edge Lane likely due to the industrial units located here. With regards to the industrial units, whilst there were some occasional noise contributions from the garage however, relative to the road traffic these were deemed to be insignificant. The same is true for the Lime Square retail park, where frequent vehicular movements were observed in the carpark which in terms of noise impact was deemed to be negligible. This is reflected in the measured noise results presented below.

4.2 Measured Noise Results

Full details of the measured results can be seen in the appendix included at the end of this report. The measurement positions on site are shown in Figure 2 above. A summary of the results is given in Table 4 below:

Table 4: Summary of noise measurements

Measurement Position	Average dB L _{Aeq,T} Daytime Friday/Saturday/Sunday	Average dB L _{Aeq,T} Night-time Friday/Saturday/Sunday	Night-time L _{AFMax} * Friday/Saturday/Sunday
Position 1 (Fairfield Road)	68 / 67 / -	60 / - / -	78 / - / -
Position 2 (Edge Lane)	63 / 61 / 60	54 / 53 / 52	71 / 70 / 68
Position 3 (Retail Park)	55 / 53 / 52	46 / 47 / 47	61 / 60 / 61

Notes:

- * The WHO Guidelines for Community Noise state that sleep disturbance may occur where the specified 45dB L_{Amax} is exceeded internally 10 to 15 times over the 8-hour night-time period. The L_{Amax} recorded for these positions is the L_{Amax} exceeded no more than 10 times over the full night-time-period or equivalent.

Full measurement results are included in the appendix to this report. Note that for the purposes of assessment only the worst-case measured noise levels have been used.

5.0 NOISE BREAK IN CALCULATIONS AND MITIGATION

In PDA's experience developments with the measured noise levels above are suitable for residential development provided that adequate acoustic attenuation is provided to habitable areas.

Considering the acoustic weak points of a building façade, typically the glazing and the ventilation elements, calculations have been undertaken to determine specifications for these building elements and the internal noise levels. These levels are compared with the criteria detailed in section 3 above.

5.1 Noise Modelling

In order to calculate the noise propagation around the site the proposed development and its surroundings were modelled in Sound Plan noise propagation software. The software uses the method of ISO 9613 'Acoustics – attenuation of sound during propagation outdoors – general method of calculation' and takes into account geometric spreading, ground effects, air absorption, barrier attenuation and reflections from the surroundings to calculate the noise levels incident at various points. The model is based on the measured noise levels given in sections 4.2 above.

An overview of the model can be seen in Figure 3 below;

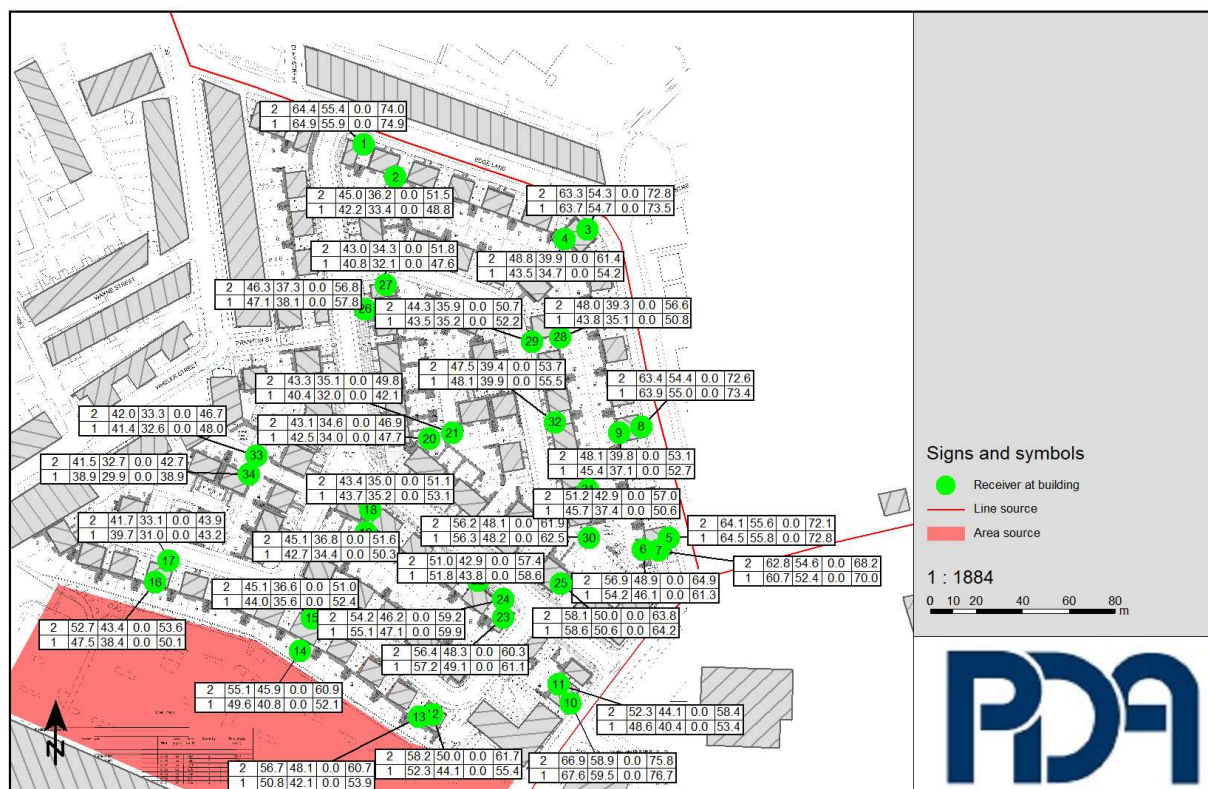


Figure 3 – Sound Plan Noise Model

*Note that the first column relates to the floor level, the 2nd = Daytime Noise Level (dB L_{Aeq}), The 3rd = Night-time Noise Level (dB L_{Aeq}) and the 5th = dB L_{AFmax}

5.2 Calculations

Based upon the measured and predicted noise levels, calculations have been undertaken to determine acoustic specification requirements for the proposed residential dwelling. Calculations have been undertaken in octave bands from 63 Hz to 8kHz inclusive, for the night-time L_{eq} , day-time L_{eq} and night-time L_{max} levels. The calculated internal noise levels are dependent on the size of room, location and relative glazing area. Room and glazing dimensions are taken from the drawings provided to us by the client.

The sound insulation provided by the building envelope is a combination of the sound reduction indices of the individual façade elements and the area of the façade they cover. The result is a composite sound insulation value for the whole façade.

The calculation of noise break-in to the residential rooms has been undertaken in accordance with the calculation methods of BS EN 12354-3:2000 *Building Acoustics – Estimation of acoustic performance of buildings from the performance of elements. Part 3: Airborne sound insulation against outdoor sound*, in octave bands. Reverberation time is 0.5 seconds as per the BS EN 12354-3 reference time for dwellings.

Information on the sound insulation properties for specific element details has either been sourced from manufacturer's literature or from Insul® Sound insulation prediction software.

5.3 Design Assumptions

5.3.1 Walls

The exact wall construction is yet to be confirmed however, for the purposes of this assessment it assumed that the wall build-up will be as follows.

70mm brickwork, 100mm insulated cavity, tied to 140mm blockwork internally lined with a single layer of 12.5mm wall board.

The sound insulation performance of this construction has been modelled using Insul and is summarised in Table 5 below:

Table 5: External Wall Acoustic Properties

Façade Element	Octave Band (Hz) Sound Insulation, R (dB)							R_w
	63	125	250	500	1000	2000	4000	
External Wall	42	47	51	50	58	68	79	58

5.3.2 Room Dimensions

Our calculations are based on the room dimensions and surface area of façade elements as follows:

Bedrooms:

Volume = 25m³

Glazing = 2m²

External Wall = 3m²

Living/Dining Rooms:

Volume = 50m³

Glazing = 4m²

External Wall = 6m²

5.4 Mitigation Strategies

Based on the results of the SP model, residential properties will achieve the recommended internal ambient noise levels within all habitable rooms utilising the following mitigation strategies. See Figure 4 below:



Figure 4 – Mitigation strategy zones

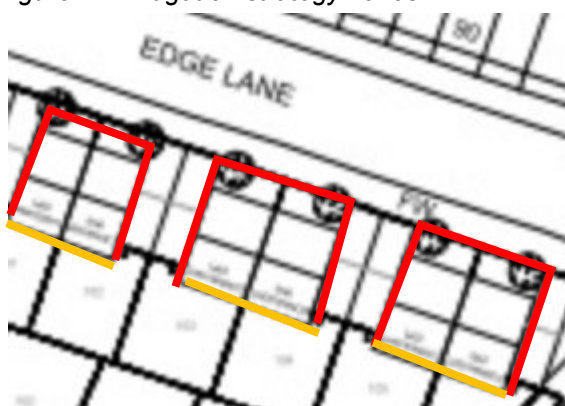


Figure 5 - Strategy outline – sample of houses showing orientation of façade treatments relative to the road for all dwellings in zone 1.

Note that due to the shielding provided by the dwelling the performance of façade elements can be reduced on the inward facing façade of plots in mitigation zone 1, this is illustrated in Figure 5. Dwellings in mitigation zone 2 require the same façade treatment all round as per Figure 6.



Figure 5 - Strategy outline – sample of houses showing orientation of façade treatments for all dwellings in zone 2.

Key

- - Mitigation Strategy A
- - Mitigation Strategy B

The strategies for zones 1 and 2 are summarised in the Tables below.

Table 6: Strategy A, Zone 1, Bedrooms, Minimum Acoustic Specification —

Windows/Glazing Noise Insulation								
Typical Product	Minimum Sound Reduction Index R (dB) at Octave Band Centre Frequency (Hz)							R_w
	63	125	250	500	1000	2000	4000	
10/12/6	22	26	27	34	40	38	46	38
Ventilation Noise Insulation								
Typical Product	Minimum D_{ne} (dB) at Octave Band Centre Frequency (Hz)							D_{ne,w}
	63	125	250	500	1000	2000	4000	
Greenwood 5000 EAW (1 Acoustic Module)	38	39	38	31	45	43	40	39

Table 7: Strategy A, Zone 1, Living/Dining Rooms, Minimum Acoustic Specification

Windows/Glazing Noise Insulation								
Typical Product	Minimum Sound Reduction Index R (dB) at Octave Band Centre Frequency (Hz)							R_w
	63	125	250	500	1000	2000	4000	
10/12/6	22	26	27	34	40	38	46	38
Ventilation Noise Insulation								
Typical Product	Minimum D_{ne} (dB) at Octave Band Centre Frequency (Hz)							D_{ne,w}
	63	125	250	500	1000	2000	4000	
Simon Acoustic EHAS	36	40	36	34	35	44	40	38

Table 8: Strategy B, Zones 1 and 2, all rooms, Minimum Acoustic Specification

Windows/Glazing Noise Insulation								
Typical Product	Minimum Sound Reduction Index R (dB) at Octave Band Centre Frequency (Hz)							R_w
	63	125	250	500	1000	2000	4000	
6/12/6	18	20	19	29	38	36	45	33
Ventilation Noise Insulation								
Typical Product	Minimum D_{ne} (dB) at Octave Band Centre Frequency (Hz)							D_{ne,w}
	63	125	250	500	1000	2000	4000	
Simon Airstrip 300*	23	28	26	26	29	29	29	29

*A standard non-acoustic trickle vent will likely achieve 29 dB D_{ne,w}

5.5 Further Details on Glazing & Ventilators

Notes on Glazing Insulation

For the glazing specifications in Tables 6-8, all sound insulation values quoted above must be achieved by the overall combination of frame and glazing, and not just by the glazing alone. The frame should not reduce the performance of the system overall.

Glazing framing systems must be fully sealed with any small gaps (<10mm nominal) around the perimeter to be stuffed with dense mineral wool to full frame depth and sealed both sides with acoustic non-setting mastic, with additional weathering protection to be applied additionally externally to this. No gaps should be left unsealed.

Notes on Ventilation Insulation

The ventilator inlets described in Tables 6-8, are calculated to provide adequate sound insulation to maintain internal noise levels compliant with the guidance criteria when used in conjunction with the specified glazing described in Tables 6-8. Selected ventilation inlets should provide equal or greater sound insulation performance across the frequency range to the values in Tables 6-8. Specifications are based on the use of one (1) ventilator per room only.

The acoustic specification relates to the combined performance of all ventilation elements. Where two or more ventilators are required to meet the ventilation requirement, the acoustic performance for a single ventilator must be selected so that the combined performance is as stated in the Tables 6-8. As an example, to achieve

an overall acoustic insulation performance of $D_{n,e,w}$ 29 dB utilising two ventilators in a single wall, both individual ventilators should be rated at $D_{n,e,w}$ 31 dB. Requirements should be checked with the manufacturer.

Please note that the specification of vents is in terms of acoustic performance only. It should be checked by others that the ventilation requirements of the Building Regulations are also met.

Fan-assisted ventilation systems should be reviewed to ensure that the fan itself does not exceed the noise criteria as specified in Section 3.

5.6 Break-in Noise Calculations Results

Based on mitigation strategies as outlined in Section 5.4 being implemented into the final building envelope design and the estimated positioning of the dwelling properties as considered within the SP model, the following predicted internal noise levels have been calculated.

Table 9: *Calculated Highest Internal Ambient Noise Levels with Mitigation Strategy*

Room Type	$L_{Aeq16hr}$, Day Time, (07:00-23:00), dBA	L_{Aeq8hr} , Night Time, (23:00-07:00), dBA	L_{Amax} , Night Time, (23:00-07:00), dBA
Zone 1 (Figure 4)			
Bedroom	34	26	42
Living/dining Rooms	33	-	-
Zone 2 (Figure 4)			
Bedroom	34	26	37
Living/dining Rooms	32	-	-

It can be seen from the results in Table 9 that with the proposed mitigation strategy as outlined in section 5.4 of this report, the internal ambient noise levels as recommended in BS8233:2014 and the World Health Organisation Guidelines are predicted to be comfortably achieved.

6.0 ALTERNATIVE VENTILATION STRATEGY

If the dwellings are to be mechanically ventilated as opposed to the attenuated trickle ventilators specified above it is unlikely that the performance of the façade will be compromised. However, we do not recommend that inlet/extract outlets are formed using a non-ducted through wall vent type arrangement. The mechanical system should incorporate a fully ducted and enclosed MVHR system, e.g. above ceiling level. It must also be ensured that any self-generated noise from the system does not exceed the internal noise level criterion detailed in Section 3 above.

As an alternative to an MVHR system it is predicted that a through wall vent with a 1m length of acoustic flexi-duct (100mm diameter) routed through the ceiling void is capable of providing sufficient attenuation. The following product is predicted to be acceptable, 1m Euroflex 350 Acoustic Flexible Ducting, see the table below:

Product	Minimum R (dB) at Octave Band Centre Frequency (Hz)					
	125	250	500	1000	2000	4000
Euroflex 350 Acoustic Flexible Ducting	28	27	36	33	31	30

7.0 NOISE LEVELS IN EXTERNAL AMENITY AREAS

With regards to noise levels within the external amenity areas of the development BS8233 recommends that;

“the external noise level does not exceed 50dB $L_{Aeq,T}$ with an upper guideline value of 55dB $L_{Aeq,T}$ which would be acceptable in noisier environments.”

Our calculations indicate that the majority of external amenity spaces will achieve the recommended lower guideline values of 50 dBA or below. Whilst there are some areas which exceed the upper guideline value of 55 dBA these are generally parking areas. Our predictions indicate that every plot will have at least some portion of the external area which is between 50 – 55 dBA. This is illustrated in Figure 6 below.

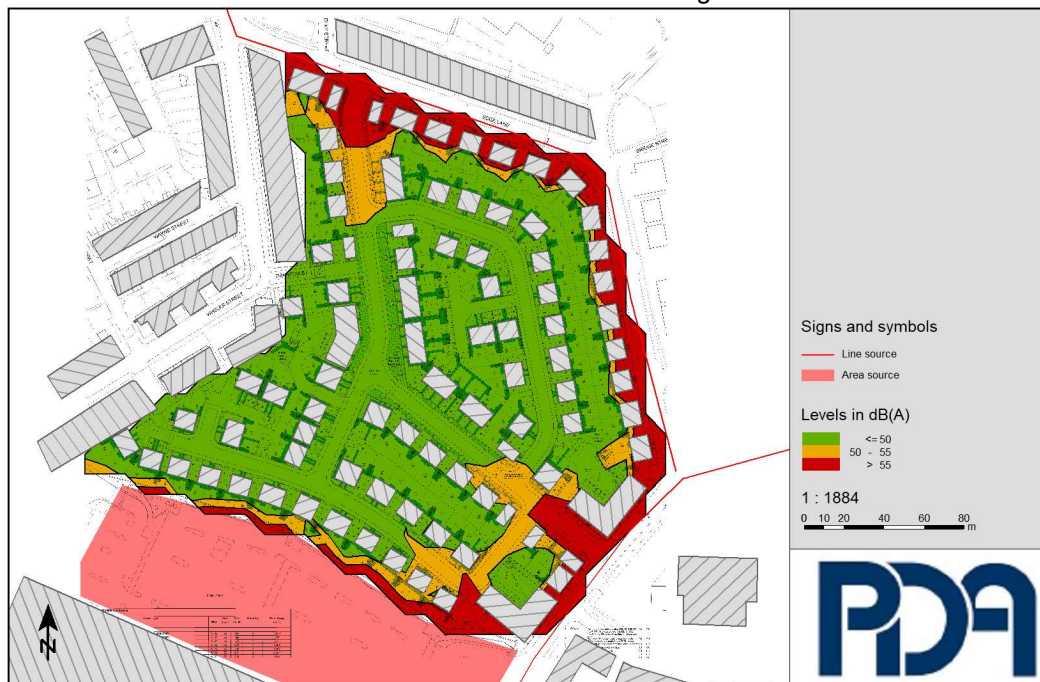


Figure 6 – Predicted noise levels in external amenity areas

BS 8233:2014, notes that the recommended design criteria is not achievable in all circumstances and that exceedance of 55 dBA does not necessarily indicate that development should be prevented.

BS 8233:2014 (section 7.7.3.2) gives the following advice:

For traditional external areas that are used for amenity space, such as gardens and patios, it is desirable that the external noise level does not exceed 50dB $L_{Aeq,T}$, with an upper guideline value of 55dB $L_{Aeq,T}$ which would be acceptable in noisier environments. However, it is also recognized that these guideline values are not achievable in all circumstances where development might be desirable. In higher noise areas, such as city centres or urban areas adjoining the strategic transport network, a compromise between elevated noise levels and other factors, such as the convenience of living in these locations or making efficient use of land resources to ensure development needs can be met, might be warranted. In such a situation, development should be designed to achieve the lowest practicable levels in these external amenity spaces, but should not be prohibited.

8.0 CDM 2015

Under the Construction Design and Management regulations 2015 (CDM) PDA Ltd has certain responsibilities with respect to health and safety matters involved with the design and construction aspects of the project. In this capacity PDA Ltd assists the 'Principal Designer' by undertaking the role of 'Designer'. The Designer's role is to identify and minimise health and safety related risks associated with consulting recommendations and advice it has provided.

The following list, albeit not intended to be exhaustive, identifies potential foreseeable risks associated with acoustic related aspects of the design, along with options for minimising / reducing said risks:

Table 9: Potential Foreseeable Health and Safety Risks - Acoustic Design Aspects

Element	Health and Safety Aspect	Mitigation to Minimise / Reduce Risk
Blocks and Boards	Weight	Follow manual handling guidelines for lifting, moving and installation
Glazed Units	Weight	Follow manual handling guidelines for lifting, moving and installation
General Construction Activities	Noise Exposure	Provision of requisite training and provision of hearing protection enforcement of use where appropriate under the 2005 Control of Noise at Work Regulations.

While examples of specific manufacturers' products may be provided in the report, there will generally be alternatives that can be used. It is noted that finalised selections of specific construction materials and/or methods must have potential health and safety risks confirmed based on information available including that from the supplier or manufacturer.

9.0 CONCLUSION

PDA Ltd was commissioned by Complete Sustainability Solutions Ltd to carry out an environmental noise assessment for the proposed residential development on the former Openshaw Industrial Estate site off Edge Lane in Openshaw, Manchester, M11 1DG.

A noise level survey has been undertaken in the vicinity of the proposed development site in order to determine the existing noise climate. The results of the noise survey were used to inform a Soundplan computer noise model and the likely noise propagation around the site has been predicted.

Recommendations are given in this report for the glazing, ventilation and building façade elements that will be required to achieve the internal noise level requirements. Our calculations suggest that the criteria of BS8233:2014 and WHO Guidelines can be achieved both within the dwellings and in the external amenity areas. Therefore, in-line with the National Planning Policy Framework on the grounds of noise we would deem this site suitable for residential development.

Appendix A – Definition of Acoustic Terms

The decibel

This is the basic unit of noise, denoted dB.

A-Weighting

This is a weighting process which simulates the human ear's different sensitivity at different frequencies. A weighting can be shown two typical ways, 50 dB(A) L_{eq} or 50 dB L_{Aeq} . Both mean the same thing. (See below for a definition of L_{eq}). The dB(A) level can be regarded as the overall level perceived by human beings.

L_{eq} and $L_{eq(s)}$

This is the equivalent continuous noise level which contains the same acoustic energy as the actual time-varying sound. In other words it is a kind of average noise level. It is denoted dB L_{eq} or, for A-weighted figures dB(A) L_{eq} or dB L_{Aeq} . It can also be expressed in terms of frequency analysis (see later). $L_{eq(s)}$ is the sample L_{eq} level.

L_n

This is the level exceeded for n% of the time. It is denoted dB L_n or, for A-weighted figures dB(A) L_n or dB L_{An} . It can be expressed in terms of frequency analysis (see later). L_{90} is the level exceeded for 90% of the time and is a measure of the lowest level typically reached. L_{10} is the level exceeded for 10% of the time and is the highest level typically reached. L_{50} is the level exceeded for 50% of the time and, mathematically, it is the median.

L_{max}

This is the maximum level reached during a measurement period. The "time constant", or the ability of the equipment to respond to impulses is usually expressed along with it, e.g. "Fast", "Slow", etc. It is denoted dB L_{max} or, for A-weighted figures dB(A) L_{max} , dB L_{Amax} , etc. It can also be expressed in terms of frequency analysis.

Frequency Analysis

Whereas dB(A) gives a very useful overall figure, it has its limitations in that it cannot be used to model or predict the effect of noise control and mitigation as this nearly always has radically different performance at different frequencies.

Frequency analysis expresses an overall noise level at each frequency or band of frequencies in the audible range. Octave band analysis divides the audible range into 10 bands from 31.5 Hz to 16 kHz and the noise level in each band can be expressed in any form e.g. L_{eq} , L_{90} , L_{max} etc. One third octave band analysis uses 30 bands.

Narrow band analysis takes the process to resolutions of less than 1 Hz. This is useful for identifying the existence of tones (whines, hums, etc.) and in pin-pointing the sources.

Appendix B – Measured Levels

Our Ref: J002716
Client: Complete Sustainability Solutions Ltd
Project: Edge Lane, Openshaw
Results: Measurement Position 1

		Octave Band Centre Frequencies (Hz), dB L _{eq}										
Date	Time	dB, L _{Aeq}	dB, L _{Amax}	dB, L _{A90}	63	125	250	500	1k	2k	4k	8k
25/10/2019	14:01:52	70	82	64	76	72	63	63	65	64	61	55
25/10/2019	14:06:52	71	78	67	72	73	64	66	66	65	62	56
25/10/2019	14:11:52	72	80	66	71	73	65	68	66	65	63	57
25/10/2019	14:16:52	72	78	66	72	74	65	66	67	66	63	58
25/10/2019	14:21:52	71	79	66	71	73	64	66	66	65	63	58
25/10/2019	14:26:52	71	78	66	70	73	64	66	66	65	62	56
25/10/2019	14:31:52	69	81	61	72	68	63	62	63	64	61	56
25/10/2019	14:36:52	72	81	65	73	73	64	65	67	66	64	59
25/10/2019	14:41:52	73	81	68	73	74	66	66	68	67	64	59
25/10/2019	14:46:52	72	84	67	72	74	65	67	66	66	63	58
25/10/2019	14:51:52	72	80	67	71	73	65	66	67	65	62	56
25/10/2019	14:56:52	71	80	67	72	72	64	65	67	65	62	57
25/10/2019	15:01:52	71	79	67	71	74	65	65	66	64	62	57
25/10/2019	15:06:52	71	79	66	71	73	65	65	67	65	62	57
25/10/2019	15:11:52	72	80	67	71	73	64	65	68	65	62	57
25/10/2019	15:16:52	72	81	68	72	73	66	67	68	66	63	57
25/10/2019	15:21:52	71	79	65	73	74	65	64	66	65	63	57
25/10/2019	15:26:52	70	77	63	71	68	62	60	63	64	62	57
25/10/2019	15:31:52	70	81	63	69	64	62	60	64	65	63	58
25/10/2019	15:36:52	70	77	63	70	63	61	59	63	65	63	58
25/10/2019	15:41:52	69	81	62	71	63	60	59	63	64	62	57
25/10/2019	15:46:52	69	79	63	71	64	61	59	63	64	63	57
25/10/2019	15:51:52	69	77	62	70	64	60	58	62	64	62	57
25/10/2019	15:56:52	71	88	61	72	66	65	65	66	65	62	59
25/10/2019	16:01:52	69	79	61	72	65	61	59	63	64	62	56
25/10/2019	16:06:52	69	77	63	72	66	62	59	63	64	62	57
25/10/2019	16:11:52	69	76	61	70	64	62	59	63	64	61	55
25/10/2019	16:16:52	67	80	59	70	63	60	58	62	61	58	53
25/10/2019	16:21:52	69	77	61	72	66	64	61	63	63	61	55
25/10/2019	16:26:52	68	75	61	71	64	62	59	62	62	60	54
25/10/2019	16:31:52	70	85	60	71	65	64	62	65	64	62	56
25/10/2019	16:36:52	67	76	57	68	63	59	57	61	61	59	53
25/10/2019	16:41:52	68	77	60	72	63	62	59	63	63	61	55
25/10/2019	16:46:52	67	76	57	68	61	59	56	61	61	59	53
25/10/2019	16:51:52	67	77	59	70	61	60	57	62	62	60	54
25/10/2019	16:56:52	67	76	59	69	67	60	57	62	61	59	54
25/10/2019	17:01:52	68	76	59	70	63	61	58	62	62	59	54
25/10/2019	17:06:52	67	75	58	69	62	60	57	62	61	58	53
25/10/2019	17:11:52	67	79	57	70	67	65	62	62	61	59	54
25/10/2019	17:16:52	68	77	59	68	61	59	57	62	63	61	55
25/10/2019	17:21:52	69	78	62	70	61	60	57	62	64	62	57
25/10/2019	17:26:52	69	78	60	69	62	61	60	62	64	63	57
25/10/2019	17:31:52	68	77	61	69	64	62	63	62	63	61	55
25/10/2019	17:36:52	69	81	62	71	67	63	63	63	63	60	55
25/10/2019	17:41:52	68	77	61	68	61	60	62	61	62	60	55
25/10/2019	17:46:52	69	78	61	68	61	61	59	63	64	63	58
25/10/2019	17:51:52	68	76	61	68	61	59	57	62	63	62	56
25/10/2019	17:56:52	68	77	60	70	61	60	57	62	63	61	56
25/10/2019	18:01:52	69	78	60	71	65	60	58	62	64	62	57
25/10/2019	18:06:52	67	75	59	68	63	60	57	61	62	60	55
25/10/2019	18:11:52	69	76	60	69	62	61	57	62	63	61	56
25/10/2019	18:16:52	68	77	59	70	64	60	57	61	63	61	55
25/10/2019	18:21:52	67	77	57	67	62	59	56	61	62	60	54
25/10/2019	18:26:52	66	76	56	69	66	61	56	60	61	59	53
25/10/2019	18:31:52	67	78	58	67	60	59	57	61	62	60	54
25/10/2019	18:36:52	67	76	53	69	64	59	56	61	62	59	53
25/10/2019	18:41:52	66	74	58	68	64	59	56	61	61	59	53
25/10/2019	18:46:52	66	76	58	68	59	58	56	61	61	59	53
25/10/2019	18:51:52	68	76	58	68	61	60	57	62	63	61	56
25/10/2019	18:56:52	66	77	58	68	66	60	56	60	60	58	53
25/10/2019	19:01:52	67	79	56	67	60	59	56	61	61	59	54
25/10/2019	19:06:52	66	76	57	67	59	58	55	60	61	59	53
25/10/2019	19:11:52	67	76	58	68	61	60	57	61	62	60	54
25/10/2019	19:16:52	68	88	57	69	68	65	60	63	63	60	55
25/10/2019	19:21:52	66	76	58	67	59	58	55	60	61	59	54
25/10/2019	19:26:52	66	75	56	69	60	58	55	60	61	59	53
25/10/2019	19:31:52	68	75	60	68	61	60	57	62	63	61	56
25/10/2019	19:36:52	66	75	56	66	61	59	56	60	61	59	53
25/10/2019	19:41:52	67	76	57	67	60	59	56	61	62	60	54
25/10/2019	19:46:52	66	75	57	70	65	60	55	60	61	59	54
25/10/2019	19:51:52	68	77	59	69	61	59	57	62	63	62	56
25/10/2019	19:56:52	68	76	59	67	60	59	56	61	63	61	56
25/10/2019	20:01:52	67	78	58	67	60	59	56	61	62	60	55

Our Ref: J002716
Client: Complete Sustainability Solutions Ltd
Project: Edge Lane, Openshaw
Results: Measurement Position 1

		Octave Band Centre Frequencies (Hz), dB L _{eq}										
Date	Time	dB, L _{Aeq}	dB, L _{Amax}	dB, L _{A90}	63	125	250	500	1k	2k	4k	8k
25/10/2019	20:06:52	67	75	58	67	62	58	56	61	62	61	55
25/10/2019	20:11:52	66	77	57	67	60	58	56	60	61	59	53
25/10/2019	20:16:52	65	77	54	67	62	57	55	59	60	58	52
25/10/2019	20:21:52	66	75	54	68	62	59	55	60	60	58	53
25/10/2019	20:26:52	66	76	56	66	59	58	55	60	61	59	54
25/10/2019	20:31:52	65	77	54	65	57	57	54	58	60	58	53
25/10/2019	20:36:52	66	84	53	66	60	57	58	60	62	59	52
25/10/2019	20:41:52	66	76	57	67	63	60	56	60	61	59	54
25/10/2019	20:46:52	65	77	56	66	59	58	54	59	60	58	53
25/10/2019	20:51:52	66	82	55	73	67	60	58	59	60	58	52
25/10/2019	20:56:52	67	76	55	67	60	59	56	61	61	59	53
25/10/2019	21:01:52	65	74	53	66	59	58	54	59	60	57	51
25/10/2019	21:06:52	64	77	53	64	56	55	53	59	59	56	51
25/10/2019	21:11:52	65	76	54	65	62	57	54	58	60	59	53
25/10/2019	21:16:52	66	75	54	68	67	58	55	59	61	59	54
25/10/2019	21:21:52	65	77	52	65	57	57	54	59	60	58	52
25/10/2019	21:26:52	64	75	53	66	63	56	53	58	59	57	51
25/10/2019	21:31:52	64	76	51	65	59	57	54	58	59	57	51
25/10/2019	21:36:52	64	75	52	65	57	56	53	59	59	57	51
25/10/2019	21:41:52	65	76	54	65	59	57	54	59	60	58	52
25/10/2019	21:46:52	65	77	54	66	60	58	54	59	59	57	51
25/10/2019	21:51:52	61	74	52	64	61	55	53	55	56	53	47
25/10/2019	21:56:52	64	75	53	64	57	57	54	59	59	57	51
25/10/2019	22:01:52	65	77	52	65	64	58	54	59	59	57	52
25/10/2019	22:06:52	62	83	50	64	56	54	51	55	56	56	48
25/10/2019	22:11:52	65	75	52	66	59	56	53	59	59	57	52
25/10/2019	22:16:52	63	76	50	64	56	54	51	57	57	55	50
25/10/2019	22:21:52	62	75	51	65	56	54	51	56	56	54	48
25/10/2019	22:26:52	62	76	51	63	56	54	52	56	57	55	50
25/10/2019	22:31:52	64	76	51	64	56	56	53	58	58	56	50
25/10/2019	22:36:52	64	77	51	63	55	55	53	59	59	57	51
25/10/2019	22:41:52	63	75	49	62	56	55	52	57	58	55	50
25/10/2019	22:46:52	63	77	50	66	59	56	53	58	58	56	50
25/10/2019	22:51:52	64	76	50	63	56	55	52	58	59	56	51
25/10/2019	22:56:52	62	74	50	62	54	53	51	56	57	54	49
25/10/2019	23:01:52	63	77	51	64	57	54	52	57	58	56	50
25/10/2019	23:06:52	64	76	51	63	55	55	52	58	58	56	51
25/10/2019	23:11:52	64	81	51	63	57	56	54	59	59	57	51
25/10/2019	23:16:52	61	76	49	62	55	54	51	56	56	53	48
25/10/2019	23:21:52	64	77	51	65	57	56	53	59	59	57	51
25/10/2019	23:26:52	63	76	51	63	59	55	52	57	58	56	50
25/10/2019	23:31:52	61	77	50	63	55	53	50	55	56	54	48
25/10/2019	23:36:52	62	76	50	63	58	55	51	57	57	55	49
25/10/2019	23:41:52	60	74	49	63	53	53	50	55	55	52	46
25/10/2019	23:46:52	62	78	50	62	56	55	51	56	57	55	49
25/10/2019	23:51:52	62	77	49	63	56	55	52	56	57	55	50
25/10/2019	23:56:52	61	74	49	61	53	52	50	55	56	54	49
26/10/2019	00:01:52	62	75	50	62	55	53	50	55	57	55	49
26/10/2019	00:06:52	58	72	50	61	52	51	49	53	53	50	44
26/10/2019	00:11:52	62	77	51	60	53	54	51	57	57	54	49
26/10/2019	00:16:52	61	75	50	61	60	53	50	55	55	53	48
26/10/2019	00:21:52	58	72	48	59	50	50	47	52	53	51	45
26/10/2019	00:26:52	60	73	48	60	52	52	50	55	55	53	47
26/10/2019	00:31:52	61	76	47	59	53	53	50	56	56	53	47
26/10/2019	00:36:52	58	74	46	61	51	50	48	53	53	50	44
26/10/2019	00:41:52	59	74	48	61	52	51	49	54	54	52	46
26/10/2019	00:46:52	60	75	46	62	53	52	51	56	55	50	44
26/10/2019	00:51:52	61	76	46	64	61	54	51	56	56	53	47
26/10/2019	00:56:52	62	79	46	63	60	58	52	57	57	53	47
26/10/2019	01:01:52	60	75	47	63	55	54	50	55	55	51	45
26/10/2019	01:06:52	61	75	45	61	56	55	51	56	55	51	45
26/10/2019	01:11:52	59	74	43	58	53	52	49	54	54	51	45
26/10/2019	01:16:52	57	72	43	58	52	51	47	52	51	49	43
26/10/2019	01:21:52	59	74	44	62	55	52	48	54	53	50	44
26/10/2019	01:26:52	57	73	46	60	51	50	47	53	52	49	42
26/10/2019	01:31:52	61	77	47	60	53	52	51	55	56	54	49
26/10/2019	01:36:52	51	63	47	56	46	42	41	44	46	43	39
26/10/2019	01:41:52	59	74	48	58	51	51	48	53	54	53	47
26/10/2019	01:46:52	56	73	45	64	61	49	45	50	50	48	43
26/10/2019	01:51:52	62	79	45	62	57	58	54	56	56	54	49
26/10/2019	01:56:52	59	72	45	59	51	51	48	53	54	51	45
26/10/2019	02:01:52	58	75	45	57	51	53	47	52	52	50	45
26/10/2019	02:06:52	56	73	47	59	51	49	46	51	51	48	42

Our Ref: J002716
Client: Complete Sustainability Solutions Ltd
Project: Edge Lane, Openshaw
Results: Measurement Position 1

		Octave Band Centre Frequencies (Hz), dB L _{eq}										
Date	Time	dB, L _{Aeq}	dB, L _{Amax}	dB, L _{A90}	63	125	250	500	1k	2k	4k	8k
26/10/2019	02:11:52	57	73	48	61	50	49	47	51	52	50	44
26/10/2019	02:16:52	61	79	49	62	58	57	54	54	55	52	47
26/10/2019	02:21:52	57	75	49	58	48	47	46	51	52	50	45
26/10/2019	02:26:52	58	73	49	60	52	51	48	52	53	52	46
26/10/2019	02:31:52	59	75	50	58	51	48	47	53	54	51	45
26/10/2019	02:36:52	60	75	50	59	52	52	49	55	55	53	47
26/10/2019	02:41:52	61	80	49	59	51	52	50	56	56	54	48
26/10/2019	02:46:52	61	74	50	64	56	54	51	55	56	54	48
26/10/2019	02:51:52	58	75	48	59	50	50	47	52	53	50	44
26/10/2019	02:56:52	58	73	49	58	49	49	47	52	53	50	44
26/10/2019	03:01:52	60	75	50	62	52	51	49	54	55	53	47
26/10/2019	03:06:52	59	75	50	57	49	48	47	53	54	51	45
26/10/2019	03:11:52	59	73	49	60	50	49	48	53	54	52	46
26/10/2019	03:16:52	59	76	49	58	52	51	49	53	54	53	47
26/10/2019	03:21:52	57	74	49	57	49	48	47	52	52	50	44
26/10/2019	03:26:52	58	74	50	59	54	51	48	53	53	51	46
26/10/2019	03:31:52	56	74	49	58	49	46	45	49	51	50	44
26/10/2019	03:36:52	58	75	48	58	50	49	48	52	52	50	45
26/10/2019	03:41:52	54	69	48	57	49	45	42	47	48	47	42
26/10/2019	03:46:52	59	74	50	58	50	50	48	53	54	52	47
26/10/2019	03:51:52	56	71	50	58	50	48	46	50	51	48	43
26/10/2019	03:56:52	58	73	49	57	49	49	47	52	52	50	44
26/10/2019	04:01:52	57	73	51	60	50	49	47	51	52	49	44
26/10/2019	04:06:52	56	72	51	57	48	47	46	50	51	49	44
26/10/2019	04:11:52	59	77	51	57	50	49	48	54	54	51	46
26/10/2019	04:16:52	60	74	51	60	52	52	50	54	55	53	48
26/10/2019	04:21:52	56	73	50	57	47	46	45	50	51	50	44
26/10/2019	04:26:52	57	74	51	58	49	48	46	50	52	51	46
26/10/2019	04:31:52	60	77	52	63	56	54	50	53	55	53	48
26/10/2019	04:36:52	56	72	52	57	48	46	45	50	51	50	45
26/10/2019	04:41:52	60	77	51	61	51	51	50	54	55	54	49
26/10/2019	04:46:52	58	73	50	59	50	49	47	53	53	50	46
26/10/2019	04:51:52	59	77	51	61	51	49	48	52	54	52	47
26/10/2019	04:56:52	61	82	52	60	58	60	54	57	55	52	46
26/10/2019	05:01:52	59	75	51	58	52	49	48	53	54	51	46
26/10/2019	05:06:52	59	74	52	60	50	49	48	52	54	52	46
26/10/2019	05:11:52	57	75	52	59	48	46	46	49	51	51	46
26/10/2019	05:16:52	61	75	50	60	53	52	50	55	56	54	48
26/10/2019	05:21:52	57	73	50	57	51	50	47	52	51	48	43
26/10/2019	05:26:52	57	71	51	58	50	48	48	52	52	50	44
26/10/2019	05:31:52	58	75	51	60	50	50	48	53	53	51	45
26/10/2019	05:36:52	54	71	51	58	48	46	46	49	49	47	42
26/10/2019	05:41:52	58	76	51	58	49	49	47	52	52	51	45
26/10/2019	05:46:52	61	75	52	62	53	52	51	55	55	53	48
26/10/2019	05:51:52	58	76	51	59	50	50	48	52	52	51	46
26/10/2019	05:56:52	60	75	52	62	54	52	49	55	55	53	47
26/10/2019	06:01:52	62	77	50	63	55	53	51	56	56	53	48
26/10/2019	06:06:52	61	80	48	63	55	53	51	55	56	55	49
26/10/2019	06:11:52	61	75	47	64	54	52	50	56	55	52	47
26/10/2019	06:16:52	59	74	48	65	56	53	49	53	53	51	46
26/10/2019	06:21:52	62	77	51	65	57	55	53	57	57	55	49
26/10/2019	06:26:52	63	79	52	66	59	56	54	57	58	56	50
26/10/2019	06:31:52	62	78	51	65	57	54	51	55	56	55	50
26/10/2019	06:36:52	60	73	51	65	57	55	50	55	55	52	47
26/10/2019	06:41:52	63	77	52	66	58	56	54	57	58	56	50
26/10/2019	06:46:52	61	74	52	64	57	54	52	55	55	52	46
26/10/2019	06:51:52	65	82	52	67	61	60	56	59	59	56	50
26/10/2019	06:56:52	62	74	51	63	55	54	51	56	56	54	48
26/10/2019	07:01:52	62	75	51	61	57	53	52	57	57	55	49
26/10/2019	07:06:52	62	77	51	60	55	53	51	57	57	54	48
26/10/2019	07:11:52	61	75	51	61	56	53	51	56	56	53	47
26/10/2019	07:16:52	62	74	51	63	56	54	52	57	57	55	48
26/10/2019	07:21:52	62	76	52	65	58	54	52	56	57	55	49
26/10/2019	07:26:52	63	75	53	66	58	54	53	58	58	55	49
26/10/2019	07:31:52	61	74	53	64	60	58	51	56	56	53	48
26/10/2019	07:36:52	62	76	52	67	60	56	51	55	57	56	50
26/10/2019	07:41:52	64	75	52	65	59	55	52	58	58	56	50
26/10/2019	07:46:52	64	76	55	66	59	55	53	59	58	56	50
26/10/2019	07:51:52	65	76	55	64	58	56	54	59	60	58	53
26/10/2019	07:56:52	65	77	54	66	60	57	54	58	59	57	52
26/10/2019	08:01:52	65	77	55	66	60	57	55	59	60	57	51
26/10/2019	08:06:52	63	77	55	66	59	54	53	58	58	56	50
26/10/2019	08:11:52	66	78	56	68	62	59	56	60	61	59	53

Our Ref: J002716
Client: Complete Sustainability Solutions Ltd
Project: Edge Lane, Openshaw
Results: Measurement Position 1

Octave Band Centre Frequencies (Hz), dB L _{eq}												
Date	Time	dB, L _{Aeq}	dB, L _{Amax}	dB, L _{A90}	63	125	250	500	1k	2k	4k	8k
26/10/2019	08:16:52	66	77	56	67	59	57	55	60	61	59	53
26/10/2019	08:21:52	65	77	57	67	62	59	56	60	60	58	52
26/10/2019	08:26:52	66	75	59	67	62	58	57	60	60	58	52
26/10/2019	08:31:52	67	80	58	69	63	60	58	61	62	60	54
26/10/2019	08:36:52	67	80	58	68	63	60	58	61	62	60	54
26/10/2019	08:41:52	66	77	59	69	64	59	58	60	61	59	53
26/10/2019	08:46:52	67	79	60	68	63	60	59	61	62	59	54
26/10/2019	08:51:52	68	79	60	68	64	60	58	62	62	60	54
26/10/2019	08:56:52	70	84	63	72	69	69	62	64	64	62	56
26/10/2019	09:01:52	68	76	60	68	64	60	58	62	62	60	54
26/10/2019	09:06:52	67	78	60	67	64	60	57	61	61	59	54
26/10/2019	09:11:52	69	79	60	68	65	61	59	64	64	62	57
26/10/2019	09:16:52	68	77	60	71	66	62	59	62	62	60	54
26/10/2019	09:21:52	68	76	59	70	65	62	58	62	63	60	54
26/10/2019	09:26:52	67	77	60	69	63	60	59	62	62	59	53
26/10/2019	09:31:52	67	78	61	69	63	60	59	61	61	58	52
26/10/2019	09:36:52	68	81	60	67	63	61	59	63	63	60	54
26/10/2019	09:41:52	69	81	62	68	65	62	60	64	64	62	56
26/10/2019	09:46:52	67	78	59	68	64	61	58	61	62	60	54
26/10/2019	09:51:52	69	80	60	69	64	63	59	63	64	61	55
26/10/2019	09:56:52	69	81	62	70	65	64	60	63	64	61	55
26/10/2019	10:01:52	68	79	61	71	66	63	60	62	63	60	54
26/10/2019	10:06:52	68	77	60	68	64	62	58	62	63	60	54
26/10/2019	10:11:52	69	79	62	69	64	62	60	63	64	61	55
26/10/2019	10:16:52	67	76	61	68	64	62	58	62	62	59	53
26/10/2019	10:21:52	67	77	61	71	66	63	59	62	62	59	53
26/10/2019	10:26:52	68	76	62	69	66	63	60	62	62	60	53
26/10/2019	10:31:52	68	76	63	69	65	62	61	62	62	59	53
26/10/2019	10:36:52	68	80	61	68	66	63	59	62	63	60	54
26/10/2019	10:41:52	69	80	61	68	64	62	59	63	64	61	56
26/10/2019	10:46:52	69	78	60	69	63	63	60	63	63	61	55
26/10/2019	10:51:52	68	78	60	69	64	63	60	63	63	59	53
26/10/2019	10:56:52	69	80	58	69	63	62	59	63	63	61	55
26/10/2019	11:01:52	69	79	61	70	64	62	59	63	64	61	55
26/10/2019	11:06:52	68	78	62	68	64	63	58	63	63	60	54
26/10/2019	11:11:52	69	77	62	71	63	62	60	63	64	61	54
26/10/2019	11:16:52	68	78	63	69	65	62	62	62	63	59	53
26/10/2019	11:21:52	68	77	63	70	64	62	62	62	63	59	53
26/10/2019	11:26:52	69	77	62	69	64	61	59	63	64	60	54
26/10/2019	11:31:52	68	76	62	70	64	61	59	62	63	61	55
26/10/2019	11:36:52	69	77	63	70	65	61	60	64	64	61	55
26/10/2019	11:41:52	69	77	62	70	65	62	59	64	64	61	54
26/10/2019	11:46:52	69	77	63	69	66	62	60	64	63	60	54
26/10/2019	11:51:52	69	78	62	73	66	63	60	64	64	60	54
26/10/2019	11:56:52	69	77	63	69	65	63	61	64	63	59	53
26/10/2019	12:01:52	68	77	62	69	65	62	59	63	62	58	52
26/10/2019	12:06:52	68	77	62	73	66	63	60	63	63	59	52
26/10/2019	12:11:52	68	77	61	68	64	61	59	63	62	58	52
26/10/2019	12:16:52	68	79	61	69	65	63	61	63	62	59	53
26/10/2019	12:21:52	69	79	63	69	65	64	61	64	63	60	54
26/10/2019	12:26:52	69	79	63	69	65	64	60	64	64	61	55
26/10/2019	12:31:52	69	79	63	71	65	62	60	64	63	60	54
26/10/2019	12:36:52	68	83	62	71	65	63	60	62	62	59	53

Our Ref: J002716
Client: Complete Sustainability Solutions Ltd
Project: Edge Lane, Openshaw
Results: Measurement Position 2

		Octave Band Centre Frequencies (Hz), dB L _{eq}										
Date	Time	dB, L _{Aeq}	dB, L _{Amax}	dB, L _{A90}	63	125	250	500	1k	2k	4k	8k
25/10/2019	13:50:00	63	84	58	74	64	59	59	60	56	51	44
25/10/2019	13:55:00	63	74	58	74	62	57	58	58	56	51	46
25/10/2019	14:00:00	63	71	59	79	65	58	57	58	57	53	48
25/10/2019	14:05:00	64	76	60	72	68	59	60	61	57	53	46
25/10/2019	14:10:00	64	71	60	72	70	60	60	60	57	52	45
25/10/2019	14:15:00	66	77	61	73	69	61	61	61	59	54	48
25/10/2019	14:20:00	64	72	60	72	66	59	61	60	57	53	47
25/10/2019	14:25:00	64	76	59	69	65	58	58	60	57	53	50
25/10/2019	14:30:00	65	78	58	75	68	61	60	60	58	53	48
25/10/2019	14:35:00	64	71	60	74	67	58	58	59	57	53	47
25/10/2019	14:40:00	66	76	61	78	68	60	60	62	58	54	50
25/10/2019	14:45:00	67	84	61	74	72	67	63	62	59	55	48
25/10/2019	14:50:00	64	74	60	72	69	59	60	60	58	54	48
25/10/2019	14:55:00	65	76	61	71	69	61	59	61	58	54	48
25/10/2019	15:00:00	65	75	61	72	69	60	59	61	59	54	47
25/10/2019	15:05:00	65	70	61	73	69	60	59	61	58	54	49
25/10/2019	15:10:00	70	80	61	74	70	65	67	68	59	55	50
25/10/2019	15:15:00	65	76	61	72	70	62	60	61	58	54	50
25/10/2019	15:20:00	66	73	63	73	71	62	61	62	59	56	50
25/10/2019	15:25:00	66	77	63	73	69	61	61	62	59	55	49
25/10/2019	15:30:00	64	80	58	70	62	57	58	60	57	54	48
25/10/2019	15:35:00	63	71	58	71	60	56	56	59	57	54	48
25/10/2019	15:40:00	64	73	59	74	61	57	57	59	58	54	48
25/10/2019	15:45:00	65	87	59	72	61	58	59	61	58	56	53
25/10/2019	15:50:00	65	76	59	71	62	57	59	60	60	55	49
25/10/2019	15:55:00	65	82	57	74	62	60	60	61	58	54	48
25/10/2019	16:00:00	73	98	60	76	67	68	69	70	64	57	52
25/10/2019	16:05:00	67	85	59	74	66	60	61	63	60	54	48
25/10/2019	16:10:00	66	78	60	72	65	61	61	62	60	54	47
25/10/2019	16:15:00	66	74	59	75	64	62	62	62	58	52	45
25/10/2019	16:20:00	65	76	60	79	66	61	60	62	57	52	45
25/10/2019	16:25:00	68	78	58	76	68	66	66	64	59	54	48
25/10/2019	16:30:00	70	84	56	75	67	67	67	68	61	56	50
25/10/2019	16:35:00	62	70	55	69	60	56	56	59	55	51	44
25/10/2019	16:40:00	63	76	55	70	64	58	58	60	56	52	45
25/10/2019	16:45:00	61	70	53	69	61	54	55	58	54	50	44
25/10/2019	16:50:00	62	71	54	69	59	56	55	59	55	51	44
25/10/2019	16:55:00	62	74	54	70	60	57	57	59	55	50	44
25/10/2019	17:00:00	62	74	54	70	60	57	56	59	55	50	44
25/10/2019	17:05:00	62	72	55	71	61	56	56	59	55	50	44
25/10/2019	17:10:00	61	68	54	70	59	54	54	58	54	49	42
25/10/2019	17:15:00	62	71	52	69	60	56	56	59	56	52	45
25/10/2019	17:20:00	63	70	55	68	57	54	55	58	57	53	48
25/10/2019	17:25:00	64	71	56	71	60	56	56	59	58	54	48
25/10/2019	17:30:00	63	80	55	70	60	56	57	59	57	53	47
25/10/2019	17:35:00	62	72	56	70	66	56	57	58	55	51	44
25/10/2019	17:40:00	61	70	54	69	57	53	56	58	54	51	44
25/10/2019	17:45:00	63	70	57	69	58	54	56	59	57	53	47
25/10/2019	17:50:00	62	69	55	68	58	54	55	58	56	53	47
25/10/2019	17:55:00	62	70	56	68	60	54	54	58	56	52	46
25/10/2019	18:00:00	62	70	55	68	58	55	55	58	56	53	46
25/10/2019	18:05:00	63	73	56	71	62	56	56	59	57	53	47
25/10/2019	18:10:00	62	69	55	68	58	53	54	58	56	52	46
25/10/2019	18:15:00	61	75	53	70	63	55	55	57	55	51	45
25/10/2019	18:20:00	61	68	53	68	59	55	54	57	55	51	45
25/10/2019	18:25:00	62	69	54	69	60	54	54	58	55	51	45
25/10/2019	18:30:00	60	70	51	66	58	52	53	57	54	50	43
25/10/2019	18:35:00	61	70	50	69	59	55	55	58	55	51	44
25/10/2019	18:40:00	61	68	49	69	63	54	53	57	54	50	43
25/10/2019	18:45:00	60	69	50	66	56	52	52	57	53	49	43
25/10/2019	18:50:00	62	70	55	69	57	53	54	58	55	51	45
25/10/2019	18:55:00	61	71	54	68	58	56	54	57	54	51	45
25/10/2019	19:00:00	60	68	51	68	60	54	54	56	53	50	43
25/10/2019	19:05:00	59	71	49	67	56	53	53	54	52	49	42
25/10/2019	19:10:00	61	69	51	66	56	54	54	57	54	51	44
25/10/2019	19:15:00	62	72	54	68	64	57	55	57	55	52	46
25/10/2019	19:20:00	60	68	51	66	58	52	53	57	54	51	44
25/10/2019	19:25:00	61	72	52	67	57	52	53	57	55	51	45
25/10/2019	19:30:00	62	71	54	71	59	54	55	59	56	52	46
25/10/2019	19:35:00	60	69	51	68	59	54	54	57	54	50	44
25/10/2019	19:40:00	61	70	54	67	59	52	53	57	54	50	44
25/10/2019	19:45:00	61	69	54	68	58	52	53	57	55	52	46
25/10/2019	19:50:00	62	76	53	71	65	56	55	58	56	52	46

Our Ref: J002716
Client: Complete Sustainability Solutions Ltd
Project: Edge Lane, Openshaw
Results: Measurement Position 2

		Octave Band Centre Frequencies (Hz), dB L _{eq}										
Date	Time	dB, L _{Aeq}	dB, L _{Amax}	dB, L _{A90}	63	125	250	500	1k	2k	4k	8k
25/10/2019	19:55:00	61	68	54	66	55	52	53	56	55	52	46
25/10/2019	20:00:00	61	74	54	66	59	54	54	57	55	52	45
25/10/2019	20:05:00	60	68	53	66	54	51	52	56	54	51	45
25/10/2019	20:10:00	61	69	52	67	58	53	54	57	55	52	46
25/10/2019	20:15:00	62	70	53	71	62	54	55	58	55	52	46
25/10/2019	20:20:00	59	68	50	67	62	52	51	55	53	49	43
25/10/2019	20:25:00	60	68	52	66	55	51	52	56	54	50	44
25/10/2019	20:30:00	60	69	51	66	56	52	53	56	54	51	45
25/10/2019	20:35:00	56	70	49	65	53	48	49	53	50	46	41
25/10/2019	20:40:00	59	69	50	65	55	50	51	55	53	49	43
25/10/2019	20:45:00	60	71	50	68	61	53	52	56	54	50	44
25/10/2019	20:50:00	60	69	51	68	65	53	53	56	54	50	44
25/10/2019	20:55:00	59	69	49	68	57	51	52	55	52	49	42
25/10/2019	21:00:00	58	71	48	65	57	55	52	55	52	48	41
25/10/2019	21:05:00	59	68	48	66	55	50	52	55	53	48	42
25/10/2019	21:10:00	58	69	50	64	57	51	51	53	52	49	43
25/10/2019	21:15:00	59	69	49	67	63	51	52	55	52	49	43
25/10/2019	21:20:00	58	69	49	65	54	52	51	54	52	49	42
25/10/2019	21:25:00	58	67	49	66	54	49	50	54	51	48	41
25/10/2019	21:30:00	57	68	48	64	55	48	49	53	51	47	41
25/10/2019	21:35:00	58	68	48	64	58	53	51	54	51	47	41
25/10/2019	21:40:00	60	71	52	69	57	51	52	56	54	50	43
25/10/2019	21:45:00	59	70	49	66	55	50	52	56	53	48	42
25/10/2019	21:50:00	58	69	48	67	58	53	52	54	52	48	42
25/10/2019	21:55:00	57	68	46	66	53	50	49	53	50	47	41
25/10/2019	22:00:00	58	71	47	65	57	55	51	54	52	48	42
25/10/2019	22:05:00	58	70	47	67	59	50	51	54	51	48	41
25/10/2019	22:10:00	55	67	46	64	52	47	47	51	48	44	38
25/10/2019	22:15:00	56	67	47	65	54	50	48	52	49	46	39
25/10/2019	22:20:00	56	69	46	65	55	48	48	52	50	46	39
25/10/2019	22:25:00	55	67	45	63	51	47	48	52	49	45	39
25/10/2019	22:30:00	58	69	45	63	52	49	50	54	51	47	40
25/10/2019	22:35:00	56	68	46	64	52	47	49	53	50	46	40
25/10/2019	22:40:00	58	69	45	64	54	50	51	55	52	48	41
25/10/2019	22:45:00	55	67	45	66	54	46	47	51	48	44	38
25/10/2019	22:50:00	59	69	46	64	57	53	53	55	52	47	41
25/10/2019	22:55:00	56	70	46	63	53	47	48	52	50	46	40
25/10/2019	23:00:00	56	70	47	65	52	48	49	53	50	46	39
25/10/2019	23:05:00	57	68	46	64	53	48	50	53	51	47	40
25/10/2019	23:10:00	56	70	46	61	53	48	49	52	49	46	40
25/10/2019	23:15:00	56	69	45	63	52	47	49	52	49	45	38
25/10/2019	23:20:00	57	69	46	63	53	49	49	54	50	46	40
25/10/2019	23:25:00	59	72	47	66	61	53	51	55	52	47	40
25/10/2019	23:30:00	55	68	46	63	53	47	48	52	49	46	39
25/10/2019	23:35:00	54	68	46	61	52	46	47	50	47	44	38
25/10/2019	23:40:00	56	71	45	61	50	48	49	53	49	45	38
25/10/2019	23:45:00	57	69	45	61	51	47	49	53	50	46	39
25/10/2019	23:50:00	55	69	45	62	51	46	48	52	49	45	38
25/10/2019	23:55:00	57	68	46	63	53	48	50	53	51	47	40
26/10/2019	00:00:00	56	67	46	62	52	47	48	52	50	46	39
26/10/2019	00:05:00	55	67	46	61	50	46	48	51	49	45	39
26/10/2019	00:10:00	57	69	47	61	52	49	49	53	51	47	40
26/10/2019	00:15:00	55	69	46	63	49	45	47	51	49	45	39
26/10/2019	00:20:00	54	68	44	60	49	44	46	51	48	43	37
26/10/2019	00:25:00	55	67	44	61	50	47	48	52	49	45	38
26/10/2019	00:30:00	53	67	42	59	49	46	46	49	47	42	36
26/10/2019	00:35:00	48	65	42	59	47	40	41	44	42	40	34
26/10/2019	00:40:00	55	68	44	65	50	47	48	52	49	44	38
26/10/2019	00:45:00	55	71	42	62	52	46	48	52	48	43	37
26/10/2019	00:50:00	55	71	42	66	59	50	47	51	47	42	36
26/10/2019	00:55:00	55	67	42	65	53	48	47	51	48	44	37
26/10/2019	01:00:00	55	68	42	62	51	48	48	51	48	44	37
26/10/2019	01:05:00	55	67	42	63	50	47	47	51	48	44	37
26/10/2019	01:10:00	55	69	40	63	50	47	48	52	48	43	37
26/10/2019	01:15:00	49	65	39	58	50	46	43	46	41	37	31
26/10/2019	01:20:00	50	65	41	59	47	43	43	47	43	39	33
26/10/2019	01:25:00	55	68	43	62	51	46	48	53	48	43	37
26/10/2019	01:30:00	48	62	43	60	46	40	40	43	42	39	34
26/10/2019	01:35:00	51	66	45	60	48	43	43	47	44	41	36
26/10/2019	01:40:00	49	62	44	58	47	42	40	44	42	40	35
26/10/2019	01:45:00	54	66	42	64	60	48	46	50	47	43	36
26/10/2019	01:50:00	52	66	41	61	49	44	45	48	46	42	35
26/10/2019	01:55:00	54	66	43	60	50	47	47	50	48	44	37

Our Ref: J002716
Client: Complete Sustainability Solutions Ltd
Project: Edge Lane, Openshaw
Results: Measurement Position 2

		Octave Band Centre Frequencies (Hz), dB L _{eq}										
Date	Time	dB, L _{Aeq}	dB, L _{Amax}	dB, L _{A90}	63	125	250	500	1k	2k	4k	8k
26/10/2019	02:00:00	48	67	42	58	46	41	41	44	42	38	33
26/10/2019	02:05:00	48	63	43	58	46	40	40	42	42	39	34
26/10/2019	02:10:00	51	66	44	61	47	43	44	47	45	42	36
26/10/2019	02:15:00	48	65	46	62	44	37	39	41	42	40	36
26/10/2019	02:20:00	52	68	46	60	47	42	44	48	46	43	37
26/10/2019	02:25:00	50	65	46	59	46	41	41	45	44	42	36
26/10/2019	02:30:00	56	69	46	62	50	47	48	52	50	46	40
26/10/2019	02:35:00	51	64	46	60	47	42	42	45	45	43	37
26/10/2019	02:40:00	55	67	46	61	51	47	47	50	49	45	39
26/10/2019	02:45:00	55	71	46	64	50	46	47	51	49	45	38
26/10/2019	02:50:00	54	69	44	60	51	47	47	51	48	44	38
26/10/2019	02:55:00	52	69	45	60	47	43	44	48	46	42	36
26/10/2019	03:00:00	51	64	47	59	48	44	44	45	45	42	37
26/10/2019	03:05:00	53	68	47	61	48	43	45	48	47	44	38
26/10/2019	03:10:00	48	60	46	58	45	38	38	41	43	41	36
26/10/2019	03:15:00	48	61	45	58	46	37	38	41	43	41	36
26/10/2019	03:20:00	50	63	46	59	47	42	41	44	44	42	37
26/10/2019	03:25:00	52	67	46	59	47	44	44	48	45	42	37
26/10/2019	03:30:00	49	62	46	57	45	41	40	43	43	41	36
26/10/2019	03:35:00	49	65	45	59	45	40	41	45	43	41	36
26/10/2019	03:40:00	51	66	45	60	46	42	42	46	45	42	36
26/10/2019	03:45:00	50	66	46	59	46	40	42	46	45	42	37
26/10/2019	03:50:00	53	67	47	59	48	44	45	48	47	44	39
26/10/2019	03:55:00	54	67	46	60	49	45	46	50	48	44	38
26/10/2019	04:00:00	54	68	48	64	50	44	45	48	48	45	39
26/10/2019	04:05:00	51	65	48	61	47	41	42	45	46	44	38
26/10/2019	04:10:00	49	59	48	57	46	40	41	42	44	42	37
26/10/2019	04:15:00	53	68	48	60	48	44	46	49	47	44	39
26/10/2019	04:20:00	54	67	48	58	46	44	46	49	48	45	39
26/10/2019	04:25:00	50	62	47	59	46	40	40	44	45	43	38
26/10/2019	04:30:00	51	65	49	59	46	42	42	46	46	44	39
26/10/2019	04:35:00	52	64	48	58	46	42	43	47	46	44	39
26/10/2019	04:40:00	53	67	47	60	47	43	45	49	47	44	38
26/10/2019	04:45:00	49	60	46	59	47	40	39	43	43	41	36
26/10/2019	04:50:00	50	65	47	59	46	41	41	45	45	43	37
26/10/2019	04:55:00	55	70	48	60	48	44	47	51	48	45	39
26/10/2019	05:00:00	55	75	47	67	52	52	50	51	47	44	38
26/10/2019	05:05:00	52	65	48	59	48	43	44	47	46	44	40
26/10/2019	05:10:00	52	64	50	62	46	41	43	46	46	44	39
26/10/2019	05:15:00	54	67	47	62	49	45	46	50	48	44	38
26/10/2019	05:20:00	51	66	45	59	49	48	46	46	44	41	36
26/10/2019	05:25:00	53	67	46	59	47	44	45	49	47	43	37
26/10/2019	05:30:00	54	68	48	61	48	45	46	51	48	44	38
26/10/2019	05:35:00	49	59	47	60	45	39	41	44	43	41	36
26/10/2019	05:40:00	51	66	47	59	47	42	43	47	44	41	36
26/10/2019	05:45:00	50	62	47	59	48	42	43	45	44	41	36
26/10/2019	05:50:00	53	67	48	63	50	43	45	49	46	43	38
26/10/2019	05:55:00	54	70	48	60	50	45	46	49	48	46	38
26/10/2019	06:00:00	55	67	47	65	53	48	48	51	49	45	38
26/10/2019	06:05:00	53	67	46	64	52	47	46	49	46	41	35
26/10/2019	06:10:00	52	67	43	63	51	44	45	49	45	41	34
26/10/2019	06:15:00	52	68	44	63	54	51	47	48	45	42	36
26/10/2019	06:20:00	51	66	45	64	54	48	46	47	44	41	35
26/10/2019	06:25:00	54	65	48	65	53	50	48	49	47	44	38
26/10/2019	06:30:00	59	74	48	67	56	52	52	54	52	49	42
26/10/2019	06:35:00	59	78	47	65	56	53	53	55	52	48	41
26/10/2019	06:40:00	58	69	48	65	56	54	53	54	50	46	38
26/10/2019	06:45:00	62	77	48	70	60	59	58	59	54	48	41
26/10/2019	06:50:00	59	73	50	68	58	54	54	56	51	47	39
26/10/2019	06:55:00	57	72	47	65	54	48	51	54	50	45	38
26/10/2019	07:00:00	56	65	47	64	53	49	49	52	49	45	39
26/10/2019	07:05:00	55	66	48	61	51	47	48	51	48	45	39
26/10/2019	07:10:00	51	61	47	60	53	47	45	46	44	41	36
26/10/2019	07:15:00	56	68	47	62	54	48	49	52	49	46	39
26/10/2019	07:20:00	57	68	48	66	55	50	51	53	50	47	40
26/10/2019	07:25:00	56	69	49	70	55	51	50	52	50	46	39
26/10/2019	07:30:00	60	75	50	69	60	57	56	56	52	47	41
26/10/2019	07:35:00	57	69	50	67	56	49	50	54	51	47	40
26/10/2019	07:40:00	54	66	49	66	55	48	47	50	48	45	40
26/10/2019	07:45:00	56	66	51	67	58	50	48	51	49	46	40
26/10/2019	07:50:00	58	70	50	66	55	50	50	54	51	48	42
26/10/2019	07:55:00	56	67	51	66	56	48	48	51	50	46	40
26/10/2019	08:00:00	59	71	52	68	59	56	51	54	52	48	49

Our Ref: J002716
Client: Complete Sustainability Solutions Ltd
Project: Edge Lane, Openshaw
Results: Measurement Position 2

		Octave Band Centre Frequencies (Hz), dB L _{eq}										
Date	Time	dB, L _{Aeq}	dB, L _{Amax}	dB, L _{A90}	63	125	250	500	1k	2k	4k	8k
26/10/2019	08:05:00	58	70	52	66	56	50	51	55	52	49	43
26/10/2019	08:10:00	63	70	55	69	62	63	60	58	55	50	46
26/10/2019	08:15:00	62	73	56	70	61	61	58	58	54	50	44
26/10/2019	08:20:00	61	69	56	68	58	60	58	57	53	49	44
26/10/2019	08:25:00	63	71	56	70	62	62	60	59	55	51	46
26/10/2019	08:30:00	61	70	57	68	58	58	58	58	53	50	43
26/10/2019	08:35:00	63	71	58	70	61	62	60	59	55	51	46
26/10/2019	08:40:00	60	69	57	70	61	56	55	56	54	49	43
26/10/2019	08:45:00	61	77	58	69	58	57	57	58	53	49	42
26/10/2019	08:50:00	64	78	58	71	62	62	60	60	56	51	46
26/10/2019	08:55:00	62	70	58	69	60	58	57	58	54	50	44
26/10/2019	09:00:00	66	71	61	71	63	63	62	62	58	53	47
26/10/2019	09:05:00	70	80	60	74	62	66	66	68	57	53	46
26/10/2019	09:10:00	63	71	57	69	62	60	59	59	56	52	45
26/10/2019	09:15:00	61	69	54	68	60	58	56	56	53	50	43
26/10/2019	09:20:00	63	74	56	72	63	61	60	59	56	52	45
26/10/2019	09:25:00	61	70	55	70	60	54	55	58	55	50	44
26/10/2019	09:30:00	61	69	56	68	59	54	56	57	54	49	44
26/10/2019	09:35:00	63	74	57	69	61	57	59	59	56	51	44
26/10/2019	09:40:00	62	71	56	70	61	55	56	59	55	51	44
26/10/2019	09:45:00	61	80	54	68	59	54	55	58	55	50	43
26/10/2019	09:50:00	61	72	55	68	59	54	55	58	55	50	44
26/10/2019	09:55:00	64	78	57	70	62	60	58	60	57	52	45
26/10/2019	10:00:00	62	70	54	68	60	55	55	58	55	51	45
26/10/2019	10:05:00	64	80	54	70	67	60	60	59	58	52	45
26/10/2019	10:10:00	63	73	57	69	62	59	58	59	56	52	45
26/10/2019	10:15:00	67	76	59	72	62	70	62	60	57	52	46
26/10/2019	10:20:00	63	77	57	71	62	61	60	59	56	50	43
26/10/2019	10:25:00	66	76	58	70	62	70	61	60	57	52	46
26/10/2019	10:30:00	62	70	56	71	61	55	56	59	55	51	44
26/10/2019	10:35:00	64	75	55	70	63	62	59	59	56	51	46
26/10/2019	10:40:00	65	76	56	69	61	68	59	59	56	51	45
26/10/2019	10:45:00	66	78	58	72	64	66	62	61	58	53	48
26/10/2019	10:50:00	65	76	53	69	60	67	59	59	56	51	45
26/10/2019	10:55:00	62	72	56	70	60	57	55	58	55	52	45
26/10/2019	11:00:00	63	72	58	69	60	58	57	59	55	51	44
26/10/2019	11:05:00	67	76	59	71	64	69	62	61	57	52	46
26/10/2019	11:10:00	63	69	58	68	59	59	57	60	55	50	44
26/10/2019	11:15:00	62	69	55	68	60	56	56	59	56	51	44
26/10/2019	11:20:00	65	79	58	69	62	63	59	61	58	53	47
26/10/2019	11:25:00	63	69	57	69	60	55	56	59	56	51	45
26/10/2019	11:30:00	66	82	60	74	62	57	57	60	63	53	46
26/10/2019	11:35:00	65	76	61	71	63	60	60	62	58	54	47
26/10/2019	11:40:00	65	75	61	69	62	59	59	61	58	53	46
26/10/2019	11:45:00	65	75	61	70	65	60	59	62	59	53	46
26/10/2019	11:50:00	64	70	59	68	61	57	58	61	57	52	45
26/10/2019	11:55:00	65	74	58	70	63	63	61	61	58	53	46
26/10/2019	12:00:00	64	71	58	71	63	58	59	61	56	51	43
26/10/2019	12:05:00	65	71	60	69	61	57	59	62	58	52	44
26/10/2019	12:10:00	65	74	59	72	65	61	60	61	57	52	45
26/10/2019	12:15:00	62	70	54	68	60	55	56	59	55	49	42
26/10/2019	12:20:00	63	69	58	68	60	57	57	60	56	51	43
26/10/2019	12:25:00	64	77	57	69	63	60	58	60	57	52	45
26/10/2019	12:30:00	65	80	58	71	61	60	59	61	57	52	45
26/10/2019	12:35:00	64	70	60	71	62	61	59	60	57	51	43
26/10/2019	12:40:00	67	79	59	72	64	68	62	62	58	53	46
26/10/2019	12:45:00	63	77	54	71	63	57	56	60	56	50	43
26/10/2019	12:50:00	63	71	57	67	65	58	57	60	56	51	43
26/10/2019	12:55:00	62	70	52	69	61	54	55	59	55	49	42
26/10/2019	13:00:00	62	69	56	69	58	55	55	59	55	50	43
26/10/2019	13:05:00	61	70	51	67	58	53	54	59	55	49	42
26/10/2019	13:10:00	62	71	51	68	57	54	55	59	55	50	42
26/10/2019	13:15:00	61	69	47	67	56	53	54	58	54	49	42
26/10/2019	13:20:00	62	70	50	68	60	55	55	58	55	50	43
26/10/2019	13:25:00	61	70	52	66	57	53	54	58	54	49	41
26/10/2019	13:30:00	61	69	47	66	58	54	54	58	53	48	41
26/10/2019	13:35:00	61	69	54	67	59	54	54	59	54	49	41
26/10/2019	13:40:00	59	70	49	66	59	52	52	57	52	46	39
26/10/2019	13:45:00	61	68	48	67	57	53	54	58	53	47	40
26/10/2019	13:50:00	61	69	50	67	58	54	54	59	54	47	40
26/10/2019	13:55:00	60	69	47	67	58	52	53	58	53	46	39
26/10/2019	14:00:00	62	69	52	69	59	54	55	59	54	47	40
26/10/2019	14:05:00	60	69	48	68	56	53	54	58	53	45	38

Our Ref: J002716
Client: Complete Sustainability Solutions Ltd
Project: Edge Lane, Openshaw
Results: Measurement Position 2

		Octave Band Centre Frequencies (Hz), dB L _{eq}										
Date	Time	dB, L _{Aeq}	dB, L _{Amax}	dB, L _{A90}	63	125	250	500	1k	2k	4k	8k
26/10/2019	14:10:00	60	70	46	67	57	52	53	57	52	46	39
26/10/2019	14:15:00	61	69	49	68	57	53	54	59	53	46	39
26/10/2019	14:20:00	61	70	53	69	59	54	55	59	54	46	39
26/10/2019	14:25:00	61	77	48	67	59	53	54	58	53	45	37
26/10/2019	14:30:00	62	70	53	68	63	57	56	59	54	46	39
26/10/2019	14:35:00	60	70	48	67	56	52	54	58	52	44	37
26/10/2019	14:40:00	61	70	52	68	60	54	54	58	53	45	38
26/10/2019	14:45:00	61	70	52	70	59	54	55	59	54	45	39
26/10/2019	14:50:00	61	69	48	68	59	54	55	59	54	46	39
26/10/2019	14:55:00	62	68	54	68	58	55	56	60	54	44	38
26/10/2019	15:00:00	62	73	52	70	59	55	55	59	54	44	37
26/10/2019	15:05:00	61	69	48	69	58	54	54	59	53	43	36
26/10/2019	15:10:00	62	70	53	72	60	55	55	60	54	44	38
26/10/2019	15:15:00	62	69	53	68	58	54	55	59	54	44	36
26/10/2019	15:20:00	62	70	52	71	59	55	55	59	54	44	38
26/10/2019	15:25:00	61	71	50	67	61	57	55	59	53	44	37
26/10/2019	15:30:00	62	73	48	68	59	55	55	60	54	44	37
26/10/2019	15:35:00	62	69	49	69	58	54	55	59	54	43	36
26/10/2019	15:40:00	62	74	51	68	58	54	55	60	54	44	36
26/10/2019	15:45:00	61	73	47	66	57	53	54	59	53	43	36
26/10/2019	15:50:00	62	70	50	67	58	55	56	60	54	43	36
26/10/2019	15:55:00	60	68	48	68	59	53	54	58	52	41	34
26/10/2019	16:00:00	61	69	50	68	58	54	55	59	53	43	35
26/10/2019	16:05:00	61	70	51	68	58	55	55	59	53	42	37
26/10/2019	16:10:00	61	70	49	68	57	53	54	59	52	41	34
26/10/2019	16:15:00	61	70	52	68	61	54	55	58	53	44	37
26/10/2019	16:20:00	61	69	53	67	60	56	56	59	53	41	33
26/10/2019	16:25:00	60	72	48	68	59	54	54	58	53	41	33
26/10/2019	16:30:00	59	68	48	66	57	52	53	57	51	41	32
26/10/2019	16:35:00	59	67	48	66	56	52	53	57	51	41	33
26/10/2019	16:40:00	59	68	48	68	58	54	53	57	51	41	33
26/10/2019	16:45:00	60	69	49	67	57	53	54	58	52	41	33
26/10/2019	16:50:00	58	68	48	66	57	54	53	56	50	40	33
26/10/2019	16:55:00	60	73	49	66	61	56	55	58	51	41	33
26/10/2019	17:00:00	58	68	46	65	56	52	52	56	50	40	33
26/10/2019	17:05:00	59	77	47	71	60	54	56	56	50	39	31
26/10/2019	17:10:00	59	68	51	67	56	52	53	58	51	39	29
26/10/2019	17:15:00	58	70	46	70	58	52	52	56	49	37	29
26/10/2019	17:20:00	58	69	47	67	56	53	52	56	50	38	29
26/10/2019	17:25:00	60	67	49	67	58	55	53	57	52	40	31
26/10/2019	17:30:00	60	69	49	67	58	54	54	57	51	39	30
26/10/2019	17:35:00	58	68	46	66	57	52	52	56	50	38	28
26/10/2019	17:40:00	58	67	47	65	56	52	52	56	50	38	30
26/10/2019	17:45:00	58	68	48	66	56	52	52	56	50	39	30
26/10/2019	17:50:00	60	69	50	68	58	53	54	57	52	41	36
26/10/2019	17:55:00	60	71	52	70	60	57	54	57	51	40	32
26/10/2019	18:00:00	60	67	48	69	59	54	54	58	52	40	32
26/10/2019	18:05:00	59	68	51	68	58	54	53	57	51	40	32
26/10/2019	18:10:00	59	69	52	66	58	55	53	57	51	38	30
26/10/2019	18:15:00	59	69	49	67	61	53	53	57	51	38	29
26/10/2019	18:20:00	59	73	49	67	62	55	54	57	51	39	30
26/10/2019	18:25:00	58	68	48	71	59	52	52	55	49	38	29
26/10/2019	18:30:00	57	68	48	66	57	52	52	55	49	37	28
26/10/2019	18:35:00	61	87	52	73	63	56	57	58	52	41	32
26/10/2019	18:40:00	59	68	49	67	57	52	53	56	51	38	28
26/10/2019	18:45:00	59	68	50	66	57	52	53	57	50	38	29
26/10/2019	18:50:00	59	70	49	68	60	53	53	57	50	39	31
26/10/2019	18:55:00	59	68	50	67	57	52	53	57	50	39	30
26/10/2019	19:00:00	58	67	48	67	58	52	52	56	50	38	28
26/10/2019	19:05:00	58	81	48	68	58	56	54	56	50	39	30
26/10/2019	19:10:00	58	73	49	67	57	52	53	56	50	38	28
26/10/2019	19:15:00	58	67	48	67	61	52	52	55	49	38	29
26/10/2019	19:20:00	58	71	47	66	56	51	52	56	50	39	30
26/10/2019	19:25:00	59	67	48	67	56	52	53	56	51	38	29
26/10/2019	19:30:00	58	69	49	66	57	51	52	56	50	37	28
26/10/2019	19:35:00	57	68	49	66	56	51	52	55	49	37	29
26/10/2019	19:40:00	58	68	48	66	56	52	53	56	49	38	29
26/10/2019	19:45:00	59	73	48	69	62	55	54	56	50	39	30
26/10/2019	19:50:00	58	70	48	70	59	54	52	56	50	38	30
26/10/2019	19:55:00	57	70	48	67	57	53	52	55	49	37	30
26/10/2019	20:00:00	58	70	50	66	57	52	53	56	50	38	29
26/10/2019	20:05:00	58	68	50	67	56	52	53	56	50	38	29
26/10/2019	20:10:00	58	72	48	68	56	52	54	56	50	38	30

Our Ref: J002716
Client: Complete Sustainability Solutions Ltd
Project: Edge Lane, Openshaw
Results: Measurement Position 2

		Octave Band Centre Frequencies (Hz), dB L _{eq}										
Date	Time	dB, L _{Aeq}	dB, L _{Amax}	dB, L _{A90}	63	125	250	500	1k	2k	4k	8k
26/10/2019	20:15:00	60	77	49	74	59	54	56	57	51	39	31
26/10/2019	20:20:00	56	66	47	66	55	49	50	54	47	34	25
26/10/2019	20:25:00	56	66	47	64	54	49	50	54	48	40	37
26/10/2019	20:30:00	56	67	47	65	54	49	50	53	48	38	32
26/10/2019	20:35:00	56	68	49	64	53	48	49	53	48	43	38
26/10/2019	20:40:00	57	68	48	66	56	51	51	55	49	42	35
26/10/2019	20:45:00	54	66	47	66	55	49	49	51	47	38	31
26/10/2019	20:50:00	58	68	48	65	56	52	52	56	51	43	37
26/10/2019	20:55:00	56	77	47	67	55	49	51	54	49	41	33
26/10/2019	21:00:00	58	71	47	66	57	55	51	55	50	42	36
26/10/2019	21:05:00	59	76	48	66	56	52	57	57	51	40	33
26/10/2019	21:10:00	58	69	48	65	57	50	52	55	50	41	34
26/10/2019	21:15:00	58	70	48	67	57	51	53	56	51	42	35
26/10/2019	21:20:00	56	67	48	65	54	49	50	54	48	39	32
26/10/2019	21:25:00	57	67	48	68	58	51	51	55	49	41	33
26/10/2019	21:30:00	55	66	48	64	55	49	49	53	48	38	31
26/10/2019	21:35:00	55	67	48	64	55	49	49	53	48	38	31
26/10/2019	21:40:00	58	69	48	67	56	51	51	55	50	39	33
26/10/2019	21:45:00	57	69	48	65	56	51	52	55	50	40	32
26/10/2019	21:50:00	59	71	49	66	57	52	53	56	51	43	36
26/10/2019	21:55:00	55	69	47	65	64	50	49	52	47	40	34
26/10/2019	22:00:00	57	69	47	65	57	54	51	54	49	42	36
26/10/2019	22:05:00	55	67	46	63	53	47	49	52	46	37	30
26/10/2019	22:10:00	56	66	48	64	55	49	50	54	48	39	33
26/10/2019	22:15:00	56	67	47	64	57	49	50	54	48	38	31
26/10/2019	22:20:00	56	67	48	65	55	50	51	54	49	38	31
26/10/2019	22:25:00	57	71	47	65	56	50	51	55	50	40	33
26/10/2019	22:30:00	55	68	47	64	54	48	49	53	47	36	29
26/10/2019	22:35:00	56	68	47	66	55	51	51	54	48	38	30
26/10/2019	22:40:00	56	68	47	63	54	49	50	54	49	39	32
26/10/2019	22:45:00	55	66	47	64	54	49	49	53	47	39	34
26/10/2019	22:50:00	57	72	47	64	54	51	51	54	49	43	38
26/10/2019	22:55:00	59	70	47	65	56	51	52	56	51	42	36
26/10/2019	23:00:00	56	70	48	64	56	52	50	54	48	40	35
26/10/2019	23:05:00	56	68	47	65	58	49	51	54	48	40	35
26/10/2019	23:10:00	54	66	46	63	56	49	49	52	46	38	34
26/10/2019	23:15:00	55	71	46	63	54	49	49	52	46	38	32
26/10/2019	23:20:00	56	69	47	64	56	51	51	54	48	38	31
26/10/2019	23:25:00	55	66	47	64	56	50	50	53	47	38	32
26/10/2019	23:30:00	56	68	46	64	56	50	50	53	48	39	32
26/10/2019	23:35:00	54	66	46	62	54	48	48	52	46	35	28
26/10/2019	23:40:00	54	67	46	62	54	48	48	52	46	38	31
26/10/2019	23:45:00	55	66	46	62	54	48	49	52	47	38	31
26/10/2019	23:50:00	51	65	46	61	53	46	45	48	44	37	30
26/10/2019	23:55:00	55	71	45	63	56	47	49	53	47	38	31
27/10/2019	00:00:00	53	67	46	62	53	46	47	51	46	37	32
27/10/2019	00:05:00	53	69	45	63	55	46	47	51	46	38	32
27/10/2019	00:10:00	57	70	46	65	54	49	50	53	51	48	36
27/10/2019	00:15:00	52	65	46	63	53	46	46	49	44	37	30
27/10/2019	00:20:00	54	65	46	64	55	48	50	51	45	38	31
27/10/2019	00:25:00	50	63	46	61	53	46	45	47	42	33	27
27/10/2019	00:30:00	55	72	46	62	53	48	49	53	48	39	33
27/10/2019	00:35:00	58	72	47	64	55	50	51	55	50	41	34
27/10/2019	00:40:00	50	65	46	61	53	47	45	47	42	33	28
27/10/2019	00:45:00	54	67	46	63	55	49	48	51	46	39	32
27/10/2019	00:50:00	55	67	47	64	54	48	48	52	47	37	30
27/10/2019	00:55:00	57	74	47	65	59	54	53	54	48	38	30
27/10/2019	01:00:00	55	65	47	64	54	48	49	52	47	42	35
27/10/2019	01:05:00	53	66	46	61	53	48	47	50	46	40	33
27/10/2019	01:10:00	56	68	45	64	53	48	49	53	48	40	33
27/10/2019	01:15:00	54	66	45	61	55	52	49	51	46	40	33
27/10/2019	01:20:00	51	66	46	61	53	46	45	47	45	42	36
27/10/2019	01:25:00	53	64	47	60	52	44	45	48	47	45	39
27/10/2019	01:30:00	56	68	46	63	53	46	48	51	50	47	41
27/10/2019	01:35:00	54	67	46	63	54	46	47	50	47	42	35
27/10/2019	01:40:00	53	65	45	61	53	47	46	49	45	41	34
27/10/2019	01:45:00	55	68	46	63	54	48	48	52	48	43	35
27/10/2019	01:50:00	56	68	46	63	54	48	50	53	48	42	35
27/10/2019	01:55:00	52	67	46	63	54	46	46	50	45	38	31
27/10/2019	02:00:00	51	64	46	61	53	45	45	48	44	36	29
27/10/2019	02:05:00	50	66	46	60	52	44	43	47	42	32	25
27/10/2019	02:10:00	54	72	46	61	54	47	48	52	46	37	32
27/10/2019	02:15:00	54	70	46	63	56	50	49	50	47	41	34

Our Ref: J002716
Client: Complete Sustainability Solutions Ltd
Project: Edge Lane, Openshaw
Results: Measurement Position 2

		Octave Band Centre Frequencies (Hz), dB L _{eq}										
Date	Time	dB, L _{Aeq}	dB, L _{Amax}	dB, L _{A90}	63	125	250	500	1k	2k	4k	8k
27/10/2019	02:20:00	48	57	46	60	52	43	41	45	40	28	22
27/10/2019	02:25:00	46	52	45	60	52	42	41	43	38	30	25
27/10/2019	02:30:00	52	67	45	61	53	46	46	50	45	38	31
27/10/2019	02:35:00	52	68	45	60	53	45	46	49	44	39	32
27/10/2019	02:40:00	46	53	45	59	52	42	40	43	39	27	21
27/10/2019	02:45:00	50	68	45	62	53	45	45	47	41	35	29
27/10/2019	02:50:00	52	69	45	60	53	46	45	49	46	40	34
27/10/2019	02:55:00	47	56	45	60	52	42	41	43	40	35	30
27/10/2019	03:00:00	53	66	45	60	52	44	44	48	47	45	39
27/10/2019	03:05:00	52	67	46	59	53	44	44	48	46	42	36
27/10/2019	03:10:00	55	69	45	62	53	47	48	52	48	43	36
27/10/2019	03:15:00	51	67	45	59	53	44	44	48	44	39	31
27/10/2019	03:20:00	51	68	45	59	53	44	44	48	44	37	30
27/10/2019	03:25:00	51	66	46	61	54	45	44	48	44	38	31
27/10/2019	03:30:00	52	67	46	60	53	45	45	49	44	37	30
27/10/2019	03:35:00	47	52	46	59	53	42	41	44	39	29	22
27/10/2019	03:40:00	49	65	46	59	53	43	42	46	42	33	26
27/10/2019	03:45:00	53	69	46	62	54	46	46	51	46	37	31
27/10/2019	03:50:00	53	67	46	61	54	46	46	50	45	38	31
27/10/2019	03:55:00	51	69	46	59	53	44	44	48	44	33	25
27/10/2019	04:00:00	47	50	46	59	53	42	41	44	39	27	23
27/10/2019	04:05:00	51	66	46	60	53	45	44	48	43	35	28
27/10/2019	04:10:00	50	65	46	60	53	44	43	47	42	33	26
27/10/2019	04:15:00	51	68	46	59	53	44	45	49	43	33	26
27/10/2019	04:20:00	50	66	46	59	53	44	43	47	43	32	24
27/10/2019	04:25:00	50	65	45	60	53	44	43	47	42	32	25
27/10/2019	04:30:00	46	50	45	59	52	42	41	43	38	27	21
27/10/2019	04:35:00	46	49	45	59	52	42	41	43	39	26	21
27/10/2019	04:40:00	49	64	45	59	52	43	42	46	41	31	25
27/10/2019	04:45:00	53	67	46	61	52	44	46	49	47	44	38
27/10/2019	04:50:00	53	67	46	60	53	45	46	50	47	42	35
27/10/2019	04:55:00	53	69	46	60	53	45	46	51	46	39	32
27/10/2019	05:00:00	46	61	45	58	52	41	40	43	39	32	27
27/10/2019	05:05:00	46	50	45	58	52	42	40	43	39	29	24
27/10/2019	05:10:00	46	59	44	58	52	41	40	42	38	31	26
27/10/2019	05:15:00	50	64	44	60	52	44	44	47	42	37	30
27/10/2019	05:20:00	46	51	44	58	52	41	40	42	38	28	22
27/10/2019	05:25:00	50	65	44	59	52	43	43	47	42	35	28
27/10/2019	05:30:00	52	68	45	58	53	44	45	49	45	38	31
27/10/2019	05:35:00	48	56	45	60	52	41	40	44	42	39	33
27/10/2019	05:40:00	46	58	45	58	52	41	39	42	39	30	26
27/10/2019	05:45:00	46	52	45	58	52	41	39	42	38	31	28
27/10/2019	05:50:00	53	67	45	64	53	45	47	51	46	40	32
27/10/2019	05:55:00	52	66	45	60	53	45	46	50	45	39	32
27/10/2019	06:00:00	49	64	42	60	52	43	43	47	42	34	27
27/10/2019	06:05:00	47	64	41	57	48	42	41	44	39	32	26
27/10/2019	06:10:00	50	66	41	57	48	43	43	47	42	37	29
27/10/2019	06:15:00	49	67	41	59	48	43	43	46	42	37	29
27/10/2019	06:20:00	43	50	42	58	47	40	39	40	32	26	21
27/10/2019	06:25:00	49	65	43	59	48	44	43	47	41	34	28
27/10/2019	06:30:00	49	64	43	59	49	44	44	47	41	35	27
27/10/2019	06:35:00	50	65	43	60	49	46	45	47	42	33	27
27/10/2019	06:40:00	51	69	43	59	48	43	45	49	43	32	25
27/10/2019	06:45:00	55	73	43	63	54	48	49	52	47	39	32
27/10/2019	06:50:00	53	67	42	59	50	46	47	50	45	39	32
27/10/2019	06:55:00	53	67	42	60	49	46	47	50	45	39	32
27/10/2019	07:00:00	51	66	43	61	49	45	45	49	44	37	30
27/10/2019	07:05:00	45	53	42	59	51	48	42	40	32	30	23
27/10/2019	07:10:00	54	67	44	62	51	47	48	51	46	38	32
27/10/2019	07:15:00	53	66	43	62	51	46	47	50	45	36	30
27/10/2019	07:20:00	45	53	43	59	49	43	41	42	35	25	21
27/10/2019	07:25:00	53	68	43	64	54	46	48	50	44	37	31
27/10/2019	07:30:00	49	65	43	61	48	43	42	45	41	40	32
27/10/2019	07:35:00	53	76	44	63	51	47	49	51	44	38	31
27/10/2019	07:40:00	51	68	44	62	50	45	46	49	43	34	33
27/10/2019	07:45:00	53	66	44	62	54	47	47	50	45	35	33
27/10/2019	07:50:00	53	67	45	62	52	48	48	50	45	36	29
27/10/2019	07:55:00	53	68	44	60	50	46	46	50	44	42	44
27/10/2019	08:00:00	54	68	44	61	51	47	47	51	45	45	45
27/10/2019	08:05:00	55	67	45	63	51	48	49	52	48	42	39
27/10/2019	08:10:00	52	66	45	61	50	46	46	50	44	35	28
27/10/2019	08:15:00	56	70	46	63	54	50	50	54	48	40	32
27/10/2019	08:20:00	53	67	45	61	50	46	47	51	45	38	32

Our Ref: J002716
Client: Complete Sustainability Solutions Ltd
Project: Edge Lane, Openshaw
Results: Measurement Position 2

		Octave Band Centre Frequencies (Hz), dB L _{eq}										
Date	Time	dB, L _{Aeq}	dB, L _{Amax}	dB, L _{A90}	63	125	250	500	1k	2k	4k	8k
27/10/2019	08:25:00	57	75	45	63	62	55	53	53	48	42	38
27/10/2019	08:30:00	53	67	45	61	51	46	47	51	46	36	29
27/10/2019	08:35:00	55	67	46	62	52	48	49	52	47	42	36
27/10/2019	08:40:00	54	67	46	61	53	49	48	51	46	37	31
27/10/2019	08:45:00	55	68	46	61	52	49	49	53	46	38	31
27/10/2019	08:50:00	54	68	46	61	54	50	50	52	46	34	28
27/10/2019	08:55:00	58	72	47	64	57	54	52	56	50	40	33
27/10/2019	09:00:00	57	69	46	64	55	52	51	54	49	42	36
27/10/2019	09:05:00	53	66	46	63	53	47	47	50	45	37	36
27/10/2019	09:10:00	56	67	47	63	54	49	50	53	48	41	35
27/10/2019	09:15:00	56	69	47	67	63	50	50	54	48	38	35
27/10/2019	09:20:00	59	71	47	65	60	52	53	57	51	42	34
27/10/2019	09:25:00	57	69	47	64	53	51	51	55	49	40	33
27/10/2019	09:30:00	56	67	46	62	55	51	50	53	48	38	32
27/10/2019	09:35:00	56	67	46	64	53	49	50	54	49	39	32
27/10/2019	09:40:00	54	67	46	61	52	48	48	52	46	36	30
27/10/2019	09:45:00	59	67	46	66	57	52	52	56	50	42	35
27/10/2019	09:50:00	58	69	46	65	55	51	52	56	50	43	36
27/10/2019	09:55:00	55	69	45	62	52	48	49	53	47	38	32
27/10/2019	10:00:00	56	67	46	64	56	51	50	54	48	40	34
27/10/2019	10:05:00	58	68	46	64	56	51	52	55	49	40	34
27/10/2019	10:10:00	58	72	46	68	66	57	54	55	49	40	33
27/10/2019	10:15:00	58	72	49	69	57	53	53	56	50	42	35
27/10/2019	10:20:00	57	68	50	63	55	51	51	54	48	40	32
27/10/2019	10:25:00	57	69	48	63	56	53	51	54	49	41	34
27/10/2019	10:30:00	57	67	49	65	57	52	52	55	49	40	33
27/10/2019	10:35:00	59	69	49	65	57	54	53	57	51	43	36
27/10/2019	10:40:00	59	68	47	63	57	55	53	56	51	42	35
27/10/2019	10:45:00	56	68	44	62	53	50	51	54	48	39	32
27/10/2019	10:50:00	59	69	46	67	56	54	53	57	51	43	37
27/10/2019	10:55:00	58	68	45	65	55	51	52	56	50	40	33
27/10/2019	11:00:00	57	67	44	64	56	52	52	55	50	41	35
27/10/2019	11:05:00	58	68	46	65	55	52	52	56	50	41	34
27/10/2019	11:10:00	57	67	45	64	53	50	51	55	49	39	33
27/10/2019	11:15:00	57	67	46	64	55	50	51	55	48	39	32
27/10/2019	11:20:00	59	66	48	68	62	56	53	57	51	41	35
27/10/2019	11:25:00	58	67	49	66	58	52	52	55	50	40	34
27/10/2019	11:30:00	60	77	48	66	56	53	53	58	53	42	36
27/10/2019	11:35:00	59	72	47	64	59	52	52	56	51	40	34
27/10/2019	11:40:00	59	68	49	64	56	54	53	56	50	42	37
27/10/2019	11:45:00	59	67	52	70	58	54	53	57	50	41	36
27/10/2019	11:50:00	60	70	49	66	57	54	54	58	52	42	35
27/10/2019	11:55:00	58	68	48	67	55	52	53	56	50	40	34
27/10/2019	12:00:00	57	66	47	64	56	53	51	55	49	42	37
27/10/2019	12:05:00	58	67	49	68	62	57	52	56	50	42	37
27/10/2019	12:10:00	59	70	50	67	57	56	54	56	50	43	38
27/10/2019	12:15:00	64	94	50	67	56	58	64	59	52	46	39
27/10/2019	12:20:00	59	77	50	68	58	54	54	57	51	44	37
27/10/2019	12:25:00	60	70	52	66	56	53	54	58	51	44	39
27/10/2019	12:30:00	59	67	52	66	58	53	53	57	51	43	36
27/10/2019	12:35:00	59	68	53	66	57	53	53	56	51	44	40
27/10/2019	12:40:00	60	73	52	66	58	54	54	57	52	44	38
27/10/2019	12:45:00	60	68	56	67	57	54	55	58	52	42	35
27/10/2019	12:50:00	60	67	53	67	60	56	55	57	51	42	36
27/10/2019	12:55:00	66	85	55	70	68	67	65	60	55	46	37
27/10/2019	13:00:00	62	81	52	70	65	61	58	59	53	42	35
27/10/2019	13:05:00	59	72	52	66	58	53	53	56	50	41	33
27/10/2019	13:10:00	59	73	51	70	59	54	54	57	51	42	36
27/10/2019	13:15:00	60	68	52	69	59	55	55	57	52	42	36
27/10/2019	13:20:00	58	67	50	66	57	53	53	56	50	40	32
27/10/2019	13:25:00	59	75	50	67	66	56	54	57	50	40	33
27/10/2019	13:30:00	59	69	51	68	59	54	54	57	51	39	32
27/10/2019	13:35:00	59	68	50	67	57	54	54	57	51	40	34
27/10/2019	13:40:00	60	73	52	71	61	58	55	57	52	42	33
27/10/2019	13:45:00	61	67	54	65	59	56	56	58	53	44	35
27/10/2019	13:50:00	61	78	55	65	60	57	58	58	53	45	37
27/10/2019	13:55:00	61	68	56	65	58	55	56	58	53	45	35
27/10/2019	14:00:00	62	69	57	67	58	55	57	59	54	45	36
27/10/2019	14:05:00	62	69	57	69	61	57	57	60	55	46	38
27/10/2019	14:10:00	61	68	54	69	59	56	56	58	53	44	35
27/10/2019	14:15:00	62	73	57	68	61	57	58	59	54	46	37
27/10/2019	14:20:00	61	69	58	67	58	55	56	58	54	46	39
27/10/2019	14:25:00	61	68	57	65	59	55	56	58	54	45	35

Our Ref: J002716
Client: Complete Sustainability Solutions Ltd
Project: Edge Lane, Openshaw
Results: Measurement Position 2

		Octave Band Centre Frequencies (Hz), dB L _{eq}										
Date	Time	dB, L _{Aeq}	dB, L _{Amax}	dB, L _{A90}	63	125	250	500	1k	2k	4k	8k
27/10/2019	14:30:00	61	68	54	66	58	55	55	58	53	44	35
27/10/2019	14:35:00	61	69	57	67	58	56	56	59	53	44	35
27/10/2019	14:40:00	60	69	53	66	58	55	55	58	51	41	33
27/10/2019	14:45:00	59	66	51	66	58	55	54	57	50	41	34
27/10/2019	14:50:00	59	70	51	67	60	57	54	57	50	40	36
27/10/2019	14:55:00	58	67	51	64	58	55	53	56	50	41	38
27/10/2019	15:00:00	59	71	52	68	59	55	54	56	50	40	34
27/10/2019	15:05:00	59	68	51	67	60	57	54	56	49	39	34
27/10/2019	15:10:00	60	70	50	67	60	57	55	57	50	41	36
27/10/2019	15:15:00	57	66	46	65	57	52	51	54	47	37	29
27/10/2019	15:20:00	58	69	47	66	57	53	53	55	49	40	34
27/10/2019	15:25:00	59	71	50	66	58	54	54	57	50	41	33
27/10/2019	15:30:00	56	66	46	66	56	52	51	54	47	37	30
27/10/2019	15:35:00	57	66	47	66	56	53	52	55	47	38	34
27/10/2019	15:40:00	58	69	49	67	56	52	52	56	49	40	35
27/10/2019	15:45:00	57	66	44	65	59	51	51	54	47	37	31
27/10/2019	15:50:00	59	67	46	67	58	53	54	57	49	38	31
27/10/2019	15:55:00	58	67	46	66	56	53	53	56	49	38	32
27/10/2019	16:00:00	58	71	47	66	55	53	53	56	49	38	31
27/10/2019	16:05:00	58	68	46	66	56	53	53	56	49	37	31
27/10/2019	16:10:00	57	68	45	66	55	52	52	55	48	37	32
27/10/2019	16:15:00	58	67	47	69	59	53	52	55	48	38	33
27/10/2019	16:20:00	58	68	47	67	55	52	52	56	49	38	30
27/10/2019	16:25:00	57	67	46	65	56	52	52	55	48	38	32
27/10/2019	16:30:00	58	67	46	66	57	53	53	56	49	37	31
27/10/2019	16:35:00	57	69	44	65	58	52	52	55	48	36	31
27/10/2019	16:40:00	57	67	46	67	56	51	52	55	48	37	31
27/10/2019	16:45:00	58	70	45	65	56	52	53	56	50	40	32
27/10/2019	16:50:00	58	71	47	68	57	53	53	55	49	38	30
27/10/2019	16:55:00	59	71	47	66	56	54	54	57	51	40	31
27/10/2019	17:00:00	63	83	47	68	68	67	60	59	52	43	34
27/10/2019	17:05:00	63	85	44	67	65	66	62	57	51	41	33
27/10/2019	17:10:00	60	78	47	73	71	60	55	56	49	42	37
27/10/2019	17:15:00	71	97	50	67	70	70	70	66	62	55	46
27/10/2019	17:20:00	57	72	44	64	55	52	52	55	48	36	27
27/10/2019	17:25:00	57	67	45	65	54	51	51	54	48	36	30
27/10/2019	17:30:00	63	82	44	73	76	64	60	57	51	42	35
27/10/2019	17:35:00	59	73	44	69	60	54	54	56	50	42	34
27/10/2019	17:40:00	57	70	44	66	55	52	52	55	49	39	31
27/10/2019	17:45:00	58	67	46	65	58	52	52	56	49	37	28
27/10/2019	17:50:00	57	68	45	68	56	52	52	55	49	37	28
27/10/2019	17:55:00	57	67	45	64	57	52	52	55	48	37	28
27/10/2019	18:00:00	57	72	44	66	58	54	52	55	48	36	28
27/10/2019	18:05:00	59	76	47	68	57	54	54	57	51	39	30
27/10/2019	18:10:00	57	67	43	65	54	51	52	55	49	37	28
27/10/2019	18:15:00	58	68	46	65	56	52	53	56	49	38	29
27/10/2019	18:20:00	58	70	45	65	59	53	53	56	50	38	30
27/10/2019	18:25:00	59	81	46	65	59	56	54	56	49	38	28
27/10/2019	18:30:00	57	74	44	64	56	52	52	55	48	37	28
27/10/2019	18:35:00	58	73	44	67	55	52	53	55	50	41	34
27/10/2019	18:40:00	56	65	46	65	57	51	50	53	47	35	27
27/10/2019	18:45:00	57	68	44	64	56	51	51	55	49	39	29
27/10/2019	18:50:00	57	68	43	64	56	52	52	55	48	35	27
27/10/2019	18:55:00	77	99	43	63	55	51	52	72	73	60	47
27/10/2019	19:00:00	56	68	44	62	54	51	51	54	48	35	27
27/10/2019	19:05:00	57	67	44	67	60	54	51	55	48	37	28
27/10/2019	19:10:00	56	67	43	63	59	50	50	54	46	35	26
27/10/2019	19:15:00	57	74	43	66	62	53	52	55	48	36	26
27/10/2019	19:20:00	58	67	46	65	57	53	53	56	49	38	29
27/10/2019	19:25:00	55	65	44	64	55	50	50	53	46	34	27
27/10/2019	19:30:00	57	70	44	64	57	53	52	55	49	37	28
27/10/2019	19:35:00	57	72	45	65	59	53	52	55	48	38	29
27/10/2019	19:40:00	54	71	44	62	52	50	49	52	46	33	26
27/10/2019	19:45:00	57	72	44	64	55	53	52	55	49	39	30
27/10/2019	19:50:00	57	73	43	67	56	53	53	55	49	39	30
27/10/2019	19:55:00	57	69	44	64	54	51	52	55	48	35	26
27/10/2019	20:00:00	58	68	46	65	55	52	53	56	49	38	30
27/10/2019	20:05:00	57	70	44	64	56	53	52	55	48	37	29
27/10/2019	20:10:00	57	67	44	66	56	52	52	55	48	37	29
27/10/2019	20:15:00	56	66	43	66	55	50	51	53	47	35	27
27/10/2019	20:20:00	55	66	45	63	54	51	50	53	47	36	28
27/10/2019	20:25:00	56	67	45	66	55	51	52	54	47	38	28
27/10/2019	20:30:00	57	68	44	65	55	51	52	54	48	38	30

Our Ref: J002716
Client: Complete Sustainability Solutions Ltd
Project: Edge Lane, Openshaw
Results: Measurement Position 2

		Octave Band Centre Frequencies (Hz), dB L _{eq}										
Date	Time	dB, L _{Aeq}	dB, L _{Amax}	dB, L _{A90}	63	125	250	500	1k	2k	4k	8k
27/10/2019	20:35:00	55	68	44	63	54	50	50	53	47	35	26
27/10/2019	20:40:00	59	69	45	69	61	53	53	57	50	38	29
27/10/2019	20:45:00	57	68	44	69	58	53	52	55	48	37	28
27/10/2019	20:50:00	56	69	45	64	55	50	51	54	47	35	28
27/10/2019	20:55:00	58	69	46	66	55	52	53	56	50	40	33
27/10/2019	21:00:00	59	87	44	65	59	54	55	57	50	40	30
27/10/2019	21:05:00	59	82	46	66	61	57	55	56	50	39	29
27/10/2019	21:10:00	57	69	45	65	55	52	52	55	48	36	28
27/10/2019	21:15:00	57	68	46	67	55	53	53	55	48	37	29
27/10/2019	21:20:00	55	67	43	64	57	52	50	53	46	35	26
27/10/2019	21:25:00	54	68	42	62	53	49	49	52	45	33	25
27/10/2019	21:30:00	54	69	42	64	54	49	49	51	45	35	27
27/10/2019	21:35:00	55	73	43	67	57	53	51	53	46	34	27
27/10/2019	21:40:00	56	67	44	64	62	51	51	54	48	36	28
27/10/2019	21:45:00	56	68	44	66	59	51	51	54	47	36	27
27/10/2019	21:50:00	54	68	44	62	55	49	50	51	45	33	26
27/10/2019	21:55:00	57	69	44	65	55	51	51	55	48	36	28
27/10/2019	22:00:00	56	70	44	63	53	49	50	54	47	35	27
27/10/2019	22:05:00	58	69	44	67	57	53	52	55	48	36	28
27/10/2019	22:10:00	56	67	45	63	57	52	51	54	47	36	28
27/10/2019	22:15:00	55	66	44	62	56	52	50	52	46	34	25
27/10/2019	22:20:00	54	66	44	63	53	49	49	52	45	33	25
27/10/2019	22:25:00	56	70	44	66	55	51	51	54	48	36	27
27/10/2019	22:30:00	55	74	43	63	58	53	51	51	45	34	26
27/10/2019	22:35:00	53	77	43	63	52	50	50	50	44	32	26
27/10/2019	22:40:00	55	67	43	64	52	48	48	52	48	36	25
27/10/2019	22:45:00	54	66	43	62	52	49	48	51	45	33	24
27/10/2019	22:50:00	54	69	43	63	54	50	50	52	46	34	27
27/10/2019	22:55:00	51	67	43	60	51	47	47	48	43	36	29
27/10/2019	23:00:00	56	69	44	66	57	52	52	53	47	38	29
27/10/2019	23:05:00	53	65	42	63	52	47	47	50	44	33	24
27/10/2019	23:10:00	53	65	43	61	51	47	47	51	45	33	25
27/10/2019	23:15:00	53	66	43	61	51	47	47	51	45	31	23
27/10/2019	23:20:00	52	66	42	62	52	45	47	50	44	32	24
27/10/2019	23:25:00	50	64	43	61	50	45	45	48	42	29	22
27/10/2019	23:30:00	55	67	44	63	53	48	49	52	47	34	25
27/10/2019	23:35:00	54	69	43	67	57	51	48	52	45	34	25
27/10/2019	23:40:00	51	65	43	60	50	46	46	49	42	30	23
27/10/2019	23:45:00	52	67	42	61	51	46	47	50	44	31	24
27/10/2019	23:50:00	54	69	43	63	54	50	50	52	45	35	27
27/10/2019	23:55:00	46	61	42	60	49	41	41	43	36	24	20
28/10/2019	00:00:00	55	68	42	63	52	49	49	52	46	34	25
28/10/2019	00:05:00	51	66	43	64	59	46	46	48	42	30	22
28/10/2019	00:10:00	52	68	42	61	51	46	47	50	43	31	24
28/10/2019	00:15:00	51	65	42	60	58	50	46	48	41	28	21
28/10/2019	00:20:00	51	65	42	62	49	45	46	49	43	30	22
28/10/2019	00:25:00	51	67	41	59	49	44	45	49	43	31	22
28/10/2019	00:30:00	52	65	43	62	58	46	47	50	43	30	22
28/10/2019	00:35:00	54	67	42	61	51	47	48	51	45	33	23
28/10/2019	00:40:00	50	66	43	59	49	44	46	48	41	29	22
28/10/2019	00:45:00	49	64	43	59	48	43	44	47	41	27	21
28/10/2019	00:50:00	49	66	42	59	48	43	44	47	41	32	24
28/10/2019	00:55:00	52	66	42	60	49	45	46	50	44	31	23
28/10/2019	01:00:00	44	53	42	59	49	41	40	41	33	21	20
28/10/2019	01:05:00	51	66	41	61	50	45	46	49	43	31	24
28/10/2019	01:10:00	52	65	44	62	54	47	47	50	43	31	23
28/10/2019	01:15:00	53	65	42	61	52	47	48	51	44	32	24
28/10/2019	01:20:00	50	64	42	61	50	46	46	48	41	30	23
28/10/2019	01:25:00	54	73	42	61	50	47	49	52	46	36	31
28/10/2019	01:30:00	53	67	41	62	51	46	48	51	46	34	24
28/10/2019	01:35:00	55	68	41	63	51	48	49	52	47	36	26
28/10/2019	01:40:00	42	47	40	58	48	38	39	39	32	20	20
28/10/2019	01:45:00	43	49	41	58	48	41	40	40	31	20	20
28/10/2019	01:50:00	46	63	40	60	48	41	41	44	34	24	21
28/10/2019	01:55:00	52	69	41	61	54	47	47	49	44	32	24
28/10/2019	02:00:00	50	65	42	60	50	44	45	47	42	30	22
28/10/2019	02:05:00	53	69	40	58	49	46	47	51	45	34	25
28/10/2019	02:10:00	53	67	41	64	62	48	47	51	45	34	25
28/10/2019	02:15:00	52	66	41	62	52	46	46	50	43	32	25
28/10/2019	02:20:00	52	71	41	58	50	44	45	50	44	31	22
28/10/2019	02:25:00	50	66	40	58	48	44	44	47	42	30	24
28/10/2019	02:30:00	55	72	40	62	53	47	49	53	47	35	25
28/10/2019	02:35:00	44	59	39	60	48	41	39	41	34	25	21

Our Ref: J002716
Client: Complete Sustainability Solutions Ltd
Project: Edge Lane, Openshaw
Results: Measurement Position 2

Date	Time	Octave Band Centre Frequencies (Hz), dB L _{eq}										
		dB, L _{Aeq}	dB, L _{Amax}	dB, L _{A90}	63	125	250	500	1k	2k	4k	8k
28/10/2019	02:40:00	50	67	40	61	49	44	45	48	43	31	23
28/10/2019	02:45:00	41	49	38	58	46	38	37	38	29	19	20
28/10/2019	02:50:00	45	63	38	59	47	40	40	42	36	26	21
28/10/2019	02:55:00	47	66	38	59	47	41	42	45	39	26	21
28/10/2019	03:00:00	51	67	39	60	49	45	45	49	43	30	22
28/10/2019	03:05:00	44	61	38	58	47	41	41	41	35	28	22
28/10/2019	03:10:00	47	64	39	58	46	42	42	44	39	26	21
28/10/2019	03:15:00	47	65	38	58	46	41	41	45	39	26	20
28/10/2019	03:20:00	53	71	39	62	54	50	51	50	44	36	26
28/10/2019	03:25:00	48	64	39	60	47	42	42	45	39	27	22
28/10/2019	03:30:00	40	50	38	60	47	38	36	36	28	19	20
28/10/2019	03:35:00	45	64	38	59	46	41	40	42	36	28	24

Our Ref: J002716
Client: Complete Sustainability Solutions Ltd
Project: Edge Lane, Openshaw
Results: Measurement Position 3

		Octave Band Centre Frequencies (Hz), dB L _{eq}										
Date	Time	dB, L _{Aeq}	dB, L _{Amax}	dB, L _{A90}	63	125	250	500	1k	2k	4k	8k
25/10/2019	13:54:10	65	88	53	62	55	53	51	51	50	46	47
25/10/2019	13:59:10	56	76	52	63	53	51	51	57	55	47	42
25/10/2019	14:04:10	60	76	54	62	52	50	49	53	52	46	40
25/10/2019	14:09:10	57	73	54	63	54	50	49	51	50	46	40
25/10/2019	14:14:10	56	63	54	62	52	51	50	52	51	48	42
25/10/2019	14:19:10	57	63	54	62	53	51	50	52	51	48	42
25/10/2019	14:24:10	57	64	54	64	54	51	49	51	49	45	39
25/10/2019	14:29:10	55	62	54	62	60	53	50	51	50	46	40
25/10/2019	14:34:10	56	63	54	65	54	51	50	51	51	47	40
25/10/2019	14:39:10	56	69	54	62	56	51	50	51	50	46	40
25/10/2019	14:44:10	56	62	53	63	53	51	49	52	51	47	40
25/10/2019	14:49:10	56	65	54	63	53	49	49	51	49	45	38
25/10/2019	14:54:10	55	60	53	62	54	52	51	51	49	45	40
25/10/2019	14:59:10	55	62	53	62	56	53	52	51	49	45	39
25/10/2019	15:04:10	56	63	53	62	54	49	49	51	50	46	40
25/10/2019	15:09:10	56	63	53	62	53	49	49	51	50	46	40
25/10/2019	15:14:10	56	61	53	64	54	51	50	51	50	46	39
25/10/2019	15:19:10	56	63	54	63	55	51	50	51	49	44	38
25/10/2019	15:24:10	55	74	53	64	56	53	52	52	52	48	41
25/10/2019	15:29:10	57	68	54	63	52	50	49	51	49	45	38
25/10/2019	15:34:10	55	61	53	64	53	52	50	52	51	47	41
25/10/2019	15:39:10	57	63	54	63	52	50	49	51	50	46	39
25/10/2019	15:44:10	56	62	54	64	54	52	50	52	52	48	42
25/10/2019	15:49:10	57	69	55	63	53	50	48	50	49	44	39
25/10/2019	15:54:10	55	62	53	64	55	52	49	51	50	46	39
25/10/2019	15:59:10	56	62	53	64	58	50	49	51	50	46	40
25/10/2019	16:04:10	56	63	53	65	60	58	55	52	49	44	37
25/10/2019	16:09:10	57	69	53	64	55	54	50	51	49	45	39
25/10/2019	16:14:10	55	63	53	64	54	52	50	51	50	48	43
25/10/2019	16:19:10	57	62	54	63	53	51	48	50	48	43	37
25/10/2019	16:24:10	54	62	52	63	56	53	50	50	47	42	35
25/10/2019	16:29:10	54	64	52	64	56	55	52	51	48	43	36
25/10/2019	16:34:10	56	65	53	63	53	52	50	51	49	44	37
25/10/2019	16:39:10	55	61	53	62	55	51	48	50	48	42	36
25/10/2019	16:44:10	54	60	52	62	53	50	48	50	48	42	34
25/10/2019	16:49:10	54	60	52	63	54	51	49	51	49	44	35
25/10/2019	16:54:10	55	62	52	62	54	52	49	50	48	42	33
25/10/2019	16:59:10	55	66	52	63	55	52	49	50	48	43	34
25/10/2019	17:04:10	55	60	53	62	53	51	48	51	48	41	32
25/10/2019	17:09:10	54	65	52	63	53	51	49	50	48	42	33
25/10/2019	17:14:10	54	62	52	62	54	53	50	51	50	45	41
25/10/2019	17:19:10	56	63	53	62	52	51	49	51	51	47	40
25/10/2019	17:24:10	56	70	53	61	58	50	50	50	49	44	37
25/10/2019	17:29:10	55	62	53	64	56	53	52	54	53	45	37
25/10/2019	17:34:10	58	69	54	63	53	53	53	55	57	47	38
25/10/2019	17:39:10	60	73	54	62	51	50	52	53	53	46	39
25/10/2019	17:44:10	58	68	54	63	57	52	50	52	50	45	38
25/10/2019	17:49:10	56	64	54	64	53	50	49	52	51	45	38
25/10/2019	17:54:10	56	62	54	63	58	50	48	51	50	45	38
25/10/2019	17:59:10	56	64	53	62	54	51	50	52	50	45	39
25/10/2019	18:04:10	56	61	54	64	56	54	52	53	51	46	39
25/10/2019	18:09:10	57	66	54	62	55	51	50	52	52	45	38
25/10/2019	18:14:10	57	68	53	63	58	53	50	51	49	44	38
25/10/2019	18:19:10	56	64	53	61	56	51	48	50	48	43	36
25/10/2019	18:24:10	54	61	51	62	59	49	47	49	48	43	36
25/10/2019	18:29:10	54	61	51	61	51	50	47	49	48	42	34
25/10/2019	18:34:10	54	64	51	62	54	52	50	50	48	42	34
25/10/2019	18:39:10	54	69	50	60	50	47	46	48	46	40	33
25/10/2019	18:44:10	52	58	49	61	50	48	46	50	48	43	35
25/10/2019	18:49:10	54	62	50	61	51	48	47	49	47	43	36
25/10/2019	18:54:10	53	64	51	61	55	52	50	50	48	43	39
25/10/2019	18:59:10	55	66	52	60	52	48	46	49	48	42	35
25/10/2019	19:04:10	53	60	49	59	54	53	49	49	46	40	33
25/10/2019	19:09:10	53	61	50	60	53	50	47	49	48	43	36
25/10/2019	19:14:10	54	60	51	59	52	49	46	49	48	43	37
25/10/2019	19:19:10	54	65	51	59	51	48	46	49	48	43	36
25/10/2019	19:24:10	54	62	51	60	56	49	46	49	47	41	35
25/10/2019	19:29:10	53	60	51	62	56	54	52	51	49	43	36
25/10/2019	19:34:10	55	64	51	59	61	48	46	49	47	42	35
25/10/2019	19:39:10	53	64	50	59	59	48	46	48	47	43	37
25/10/2019	19:44:10	53	61	51	60	51	47	46	49	48	43	38
25/10/2019	19:49:10	54	61	51	60	52	50	47	50	49	44	38
25/10/2019	19:54:10	54	60	52	60	56	52	50	50	48	43	37

Our Ref: J002716
Client: Complete Sustainability Solutions Ltd
Project: Edge Lane, Openshaw
Results: Measurement Position 3

		Octave Band Centre Frequencies (Hz), dB L _{eq}										
Date	Time	dB, L _{Aeq}	dB, L _{Amax}	dB, L _{A90}	63	125	250	500	1k	2k	4k	8k
25/10/2019	19:59:10	54	65	51	58	49	46	45	48	47	42	37
25/10/2019	20:04:10	52	59	51	59	50	46	45	48	46	41	36
25/10/2019	20:09:10	52	58	50	61	52	49	48	49	47	41	35
25/10/2019	20:14:10	53	60	51	59	50	46	44	47	45	40	35
25/10/2019	20:19:10	51	58	49	58	50	47	45	47	45	40	34
25/10/2019	20:24:10	51	57	49	57	49	47	46	48	46	41	35
25/10/2019	20:29:10	52	62	48	59	53	50	47	47	47	42	35
25/10/2019	20:34:10	52	60	49	57	51	47	45	46	45	40	34
25/10/2019	20:39:10	51	64	48	57	57	46	44	47	45	39	33
25/10/2019	20:44:10	51	59	48	57	50	47	44	47	45	40	34
25/10/2019	20:49:10	51	62	49	60	50	47	49	48	45	40	34
25/10/2019	20:54:10	53	74	48	58	52	50	49	48	46	40	33
25/10/2019	20:59:10	53	63	49	58	49	47	44	47	45	38	31
25/10/2019	21:04:10	51	59	47	59	53	51	47	47	45	40	34
25/10/2019	21:09:10	52	60	48	58	52	45	44	46	45	39	34
25/10/2019	21:14:10	51	56	48	57	58	47	44	46	43	38	33
25/10/2019	21:19:10	50	60	47	56	57	49	47	47	45	39	33
25/10/2019	21:24:10	52	68	48	56	50	44	43	46	43	38	32
25/10/2019	21:29:10	50	55	47	59	56	52	49	48	45	40	33
25/10/2019	21:34:10	53	62	47	59	53	45	43	47	45	40	33
25/10/2019	21:39:10	51	58	47	56	48	44	43	46	44	39	33
25/10/2019	21:44:10	50	59	46	60	59	52	51	49	47	41	34
25/10/2019	21:49:10	54	69	49	54	49	44	42	45	43	38	32
25/10/2019	21:54:10	49	55	47	55	47	44	44	46	45	39	32
25/10/2019	21:59:10	50	61	47	56	51	45	43	46	43	37	31
25/10/2019	22:04:10	50	58	46	56	49	44	42	44	42	36	30
25/10/2019	22:09:10	48	54	46	56	50	49	46	48	45	39	32
25/10/2019	22:14:10	52	67	46	57	50	44	42	44	42	37	30
25/10/2019	22:19:10	48	57	46	56	49	44	42	45	43	37	31
25/10/2019	22:24:10	49	59	46	54	47	43	42	45	41	34	28
25/10/2019	22:29:10	48	56	45	55	46	43	41	44	40	34	28
25/10/2019	22:34:10	47	52	45	53	45	41	40	42	39	34	29
25/10/2019	22:39:10	46	53	43	60	51	45	40	42	39	34	28
25/10/2019	22:44:10	46	57	42	57	55	51	49	46	39	34	29
25/10/2019	22:49:10	51	65	43	53	43	40	39	41	38	34	29
25/10/2019	22:54:10	45	52	42	53	45	41	39	42	39	35	29
25/10/2019	22:59:10	46	58	43	56	46	42	41	43	40	35	30
25/10/2019	23:04:10	47	56	44	53	45	41	39	42	39	34	29
25/10/2019	23:09:10	45	56	42	54	52	45	42	42	39	34	29
25/10/2019	23:14:10	47	55	43	55	46	41	41	44	40	35	29
25/10/2019	23:19:10	47	69	43	54	49	44	41	42	40	34	29
25/10/2019	23:24:10	47	64	43	52	45	40	39	41	39	35	30
25/10/2019	23:29:10	45	53	42	52	46	41	38	41	38	34	29
25/10/2019	23:34:10	45	54	42	53	43	39	38	40	38	33	28
25/10/2019	23:39:10	44	52	41	57	55	49	42	40	38	33	28
25/10/2019	23:44:10	47	61	41	50	42	40	40	40	38	33	28
25/10/2019	23:49:10	44	52	41	55	46	42	41	42	41	36	29
25/10/2019	23:54:10	47	56	42	53	45	41	39	41	38	34	29
25/10/2019	23:59:10	45	52	42	51	42	39	39	40	39	36	30
26/10/2019	00:04:10	45	56	42	52	47	43	40	43	41	40	34
26/10/2019	00:09:10	48	64	42	49	41	38	38	40	38	34	30
26/10/2019	00:14:10	45	51	41	51	43	38	38	41	38	34	30
26/10/2019	00:19:10	45	53	42	55	42	38	39	41	38	33	28
26/10/2019	00:24:10	45	55	41	50	46	43	40	39	36	30	26
26/10/2019	00:29:10	44	54	38	50	42	36	36	39	35	29	24
26/10/2019	00:34:10	42	55	37	54	45	42	45	46	43	37	31
26/10/2019	00:39:10	50	69	38	49	41	36	37	39	35	30	26
26/10/2019	00:44:10	42	57	38	52	46	39	38	39	35	28	23
26/10/2019	00:49:10	42	57	38	51	44	41	37	40	36	29	23
26/10/2019	00:54:10	43	58	38	51	48	42	39	39	34	28	22
26/10/2019	00:59:10	43	53	38	51	43	37	35	36	32	27	23
26/10/2019	01:04:10	40	47	37	50	41	38	36	38	34	27	22
26/10/2019	01:09:10	41	54	37	51	54	45	38	36	31	24	20
26/10/2019	01:14:10	43	57	35	48	39	35	34	36	32	26	21
26/10/2019	01:19:10	39	50	36	50	41	37	37	39	36	29	24
26/10/2019	01:24:10	42	50	38	47	38	34	34	37	34	30	25
26/10/2019	01:29:10	40	48	38	48	39	35	36	38	36	33	28
26/10/2019	01:34:10	42	50	39	50	43	40	37	38	36	33	27
26/10/2019	01:39:10	43	51	40	49	43	36	36	38	35	31	26
26/10/2019	01:44:10	42	54	38	50	40	36	35	37	34	28	23
26/10/2019	01:49:10	41	51	37	51	44	44	41	39	36	29	23
26/10/2019	01:54:10	44	59	39	52	46	36	35	38	34	28	23
26/10/2019	01:59:10	41	51	38	52	43	42	41	42	39	33	26

Our Ref: J002716
Client: Complete Sustainability Solutions Ltd
Project: Edge Lane, Openshaw
Results: Measurement Position 3

		Octave Band Centre Frequencies (Hz), dB L _{eq}										
Date	Time	dB, L _{Aeq}	dB, L _{Amax}	dB, L _{A90}	63	125	250	500	1k	2k	4k	8k
26/10/2019	02:04:10	46	58	38	56	41	40	39	40	41	36	29
26/10/2019	02:09:10	46	59	40	48	38	37	37	38	37	34	29
26/10/2019	02:14:10	43	53	40	50	43	43	42	41	39	35	30
26/10/2019	02:19:10	46	59	41	48	39	35	35	37	36	34	29
26/10/2019	02:24:10	42	50	40	51	41	37	38	40	40	40	35
26/10/2019	02:29:10	46	62	41	51	40	35	36	38	37	35	30
26/10/2019	02:34:10	43	52	41	50	40	37	38	39	38	35	30
26/10/2019	02:39:10	44	58	41	49	40	37	38	39	38	35	30
26/10/2019	02:44:10	44	56	41	48	39	36	36	38	37	34	29
26/10/2019	02:49:10	43	51	40	47	37	34	35	37	36	33	28
26/10/2019	02:54:10	42	51	40	47	38	34	35	37	37	34	30
26/10/2019	02:59:10	42	49	40	50	42	42	42	39	39	36	31
26/10/2019	03:04:10	45	54	42	47	37	33	35	37	37	35	31
26/10/2019	03:09:10	43	51	41	48	37	34	35	37	37	35	30
26/10/2019	03:14:10	42	49	40	49	42	40	37	38	38	36	31
26/10/2019	03:19:10	44	54	42	52	45	43	46	46	46	39	33
26/10/2019	03:24:10	51	76	40	49	41	40	35	38	37	34	29
26/10/2019	03:29:10	43	50	41	47	37	32	33	35	36	34	29
26/10/2019	03:34:10	41	51	40	49	39	34	35	39	38	35	29
26/10/2019	03:39:10	44	55	40	48	37	34	35	38	38	35	30
26/10/2019	03:44:10	43	51	41	48	38	35	36	38	38	36	31
26/10/2019	03:49:10	44	58	42	49	39	36	37	39	39	35	30
26/10/2019	03:54:10	45	54	41	47	37	34	35	37	37	35	31
26/10/2019	03:59:10	43	50	41	47	37	34	36	38	38	36	32
26/10/2019	04:04:10	44	52	42	49	40	39	38	38	38	36	32
26/10/2019	04:09:10	44	51	42	47	37	34	36	38	38	36	32
26/10/2019	04:14:10	43	51	42	48	38	35	37	39	39	36	32
26/10/2019	04:19:10	44	51	43	50	39	35	37	40	39	36	32
26/10/2019	04:24:10	45	55	43	49	40	37	38	40	39	37	33
26/10/2019	04:29:10	45	53	43	50	40	35	37	40	40	37	33
26/10/2019	04:34:10	45	51	43	49	39	34	36	41	39	37	33
26/10/2019	04:39:10	45	51	44	51	42	36	37	41	39	36	32
26/10/2019	04:44:10	45	53	43	50	42	38	38	40	39	37	32
26/10/2019	04:49:10	45	52	44	52	41	36	39	41	40	37	32
26/10/2019	04:54:10	46	53	43	51	40	36	38	40	39	37	32
26/10/2019	04:59:10	45	56	43	49	40	36	38	40	39	37	33
26/10/2019	05:04:10	45	50	44	49	40	36	39	42	41	39	35
26/10/2019	05:09:10	47	53	46	49	41	37	38	41	40	37	33
26/10/2019	05:14:10	46	52	44	53	48	47	45	42	39	36	31
26/10/2019	05:19:10	47	59	43	53	50	46	47	47	44	39	33
26/10/2019	05:24:10	51	64	43	52	43	37	39	40	39	35	30
26/10/2019	05:29:10	45	55	42	52	42	37	38	40	37	35	30
26/10/2019	05:34:10	44	52	42	52	43	38	38	38	37	35	31
26/10/2019	05:39:10	43	51	42	53	43	38	40	41	39	35	30
26/10/2019	05:44:10	45	57	42	56	48	41	40	41	40	37	32
26/10/2019	05:49:10	46	54	43	52	43	38	40	41	40	37	32
26/10/2019	05:54:10	46	56	42	57	49	41	39	41	39	35	31
26/10/2019	05:59:10	46	52	42	55	51	46	43	41	39	34	29
26/10/2019	06:04:10	46	55	41	56	49	43	40	39	35	29	24
26/10/2019	06:09:10	44	54	39	59	55	50	45	40	37	32	36
26/10/2019	06:14:10	48	60	41	58	54	48	48	46	44	37	34
26/10/2019	06:19:10	51	65	40	60	52	48	44	41	39	35	31
26/10/2019	06:24:10	47	58	43	59	53	49	46	42	41	37	32
26/10/2019	06:29:10	49	57	44	58	51	43	39	41	39	35	30
26/10/2019	06:34:10	46	53	42	58	54	51	49	43	38	34	31
26/10/2019	06:39:10	50	65	43	61	56	51	47	42	40	39	34
26/10/2019	06:44:10	50	59	44	60	54	50	46	42	39	35	30
26/10/2019	06:49:10	48	56	43	59	50	44	41	42	39	35	29
26/10/2019	06:54:10	46	55	43	55	50	46	42	40	40	36	37
26/10/2019	06:59:10	47	61	41	55	47	43	41	43	40	37	35
26/10/2019	07:04:10	47	55	43	53	50	44	40	41	40	38	33
26/10/2019	07:09:10	46	58	42	56	54	47	42	40	38	35	30
26/10/2019	07:14:10	46	55	43	56	51	47	43	42	40	42	34
26/10/2019	07:19:10	49	59	44	57	53	48	45	43	43	41	34
26/10/2019	07:24:10	50	59	45	57	51	48	45	44	43	38	36
26/10/2019	07:29:10	49	59	46	57	59	48	43	43	41	38	39
26/10/2019	07:34:10	49	65	46	57	51	47	43	43	42	38	34
26/10/2019	07:39:10	49	56	46	58	60	48	45	47	45	41	36
26/10/2019	07:44:10	52	66	48	58	51	47	44	46	46	42	36
26/10/2019	07:49:10	51	64	48	57	51	47	44	46	46	41	36
26/10/2019	07:54:10	51	59	48	57	60	51	54	49	44	39	36
26/10/2019	07:59:10	54	72	48	56	49	47	43	45	44	41	38
26/10/2019	08:04:10	50	63	48	58	49	46	45	46	46	42	36

Our Ref: J002716
Client: Complete Sustainability Solutions Ltd
Project: Edge Lane, Openshaw
Results: Measurement Position 3

		Octave Band Centre Frequencies (Hz), dB L _{eq}										
Date	Time	dB, L _{Aeq}	dB, L _{Amax}	dB, L _{A90}	63	125	250	500	1k	2k	4k	8k
26/10/2019	08:09:10	51	60	48	59	51	48	47	48	47	43	38
26/10/2019	08:14:10	53	70	50	57	53	48	46	48	46	42	36
26/10/2019	08:19:10	52	61	49	57	53	47	45	47	45	42	38
26/10/2019	08:24:10	51	63	49	58	50	48	46	47	46	42	39
26/10/2019	08:29:10	52	59	50	59	50	47	47	49	48	44	40
26/10/2019	08:34:10	54	66	51	58	49	45	45	48	47	44	38
26/10/2019	08:39:10	53	62	49	60	50	48	46	48	46	42	37
26/10/2019	08:44:10	53	60	50	59	51	50	47	49	48	46	40
26/10/2019	08:49:10	54	63	51	59	53	51	47	50	49	46	40
26/10/2019	08:54:10	55	64	53	58	52	51	47	49	48	45	40
26/10/2019	08:59:10	54	61	53	59	52	51	49	52	51	48	43
26/10/2019	09:04:10	57	65	53	62	56	50	47	49	48	44	40
26/10/2019	09:09:10	54	61	52	61	53	51	50	50	50	47	42
26/10/2019	09:14:10	56	61	53	61	61	49	46	48	46	42	36
26/10/2019	09:19:10	53	60	50	62	57	48	46	49	48	43	36
26/10/2019	09:24:10	53	60	51	60	51	46	45	47	47	42	37
26/10/2019	09:29:10	52	59	50	59	50	47	46	47	46	43	39
26/10/2019	09:34:10	52	61	50	59	51	49	46	47	46	42	36
26/10/2019	09:39:10	52	60	49	60	50	48	49	52	52	49	44
26/10/2019	09:44:10	58	65	53	62	52	49	49	51	51	48	42
26/10/2019	09:49:10	57	66	53	60	59	49	49	51	50	47	41
26/10/2019	09:54:10	56	63	52	60	50	50	47	50	48	45	39
26/10/2019	09:59:10	54	62	52	61	51	50	48	51	49	46	40
26/10/2019	10:04:10	55	65	53	62	52	50	48	50	50	45	39
26/10/2019	10:09:10	55	77	52	61	50	46	46	49	47	43	36
26/10/2019	10:14:10	53	58	51	60	52	50	48	50	48	47	41
26/10/2019	10:19:10	55	66	52	61	53	50	48	49	48	44	37
26/10/2019	10:24:10	54	61	51	62	51	47	47	49	48	44	37
26/10/2019	10:29:10	54	61	52	63	55	52	48	49	48	42	35
26/10/2019	10:34:10	54	61	52	60	52	49	46	48	47	42	36
26/10/2019	10:39:10	53	57	50	62	53	51	47	49	47	43	37
26/10/2019	10:44:10	53	59	51	61	53	50	47	49	48	43	36
26/10/2019	10:49:10	54	69	51	60	52	49	47	48	47	42	36
26/10/2019	10:54:10	53	61	51	62	54	54	48	49	48	44	38
26/10/2019	10:59:10	54	63	52	62	54	51	47	49	48	42	37
26/10/2019	11:04:10	54	65	52	64	57	51	47	50	48	43	36
26/10/2019	11:09:10	54	60	51	66	58	51	49	50	49	43	36
26/10/2019	11:14:10	55	66	52	64	55	51	48	49	48	42	34
26/10/2019	11:19:10	54	62	51	63	54	49	48	50	48	43	36
26/10/2019	11:24:10	54	60	52	63	60	49	48	50	49	44	38
26/10/2019	11:29:10	55	60	52	62	53	49	48	50	49	44	38
26/10/2019	11:34:10	55	59	53	63	54	53	48	50	49	44	38
26/10/2019	11:39:10	55	63	52	63	55	53	50	50	48	44	38
26/10/2019	11:44:10	55	65	53	62	52	48	47	49	48	43	36
26/10/2019	11:49:10	54	61	52	62	52	49	48	48	47	41	33
26/10/2019	11:54:10	53	61	49	63	52	48	48	50	48	43	37
26/10/2019	11:59:10	54	70	51	62	54	49	48	50	49	42	33
26/10/2019	12:04:10	54	70	50	62	52	50	47	49	48	43	35
26/10/2019	12:09:10	54	61	52	62	51	47	47	49	46	41	32
26/10/2019	12:14:10	53	61	50	62	54	53	48	50	48	43	36
26/10/2019	12:19:10	54	61	52	65	55	54	53	55	54	47	36
26/10/2019	12:24:10	59	69	53	63	51	47	50	52	53	45	35
26/10/2019	12:29:10	57	67	52	64	53	50	48	50	48	43	37
26/10/2019	12:34:10	54	62	51	64	56	48	47	49	48	41	32
26/10/2019	12:39:10	54	61	50	63	53	49	48	50	48	43	35
26/10/2019	12:44:10	54	60	51	65	61	51	47	49	47	42	34
26/10/2019	12:49:10	54	67	51	62	55	46	46	48	46	41	33
26/10/2019	12:54:10	52	58	50	60	50	45	45	48	46	40	30
26/10/2019	12:59:10	52	59	49	63	52	46	46	48	46	40	32
26/10/2019	13:04:10	52	60	50	63	52	46	46	48	48	42	33
26/10/2019	13:09:10	53	59	50	62	51	46	46	48	46	41	32
26/10/2019	13:14:10	52	57	50	62	56	53	47	48	46	40	32
26/10/2019	13:19:10	53	61	50	63	51	46	45	48	46	40	31
26/10/2019	13:24:10	52	59	49	62	50	47	45	48	46	40	32
26/10/2019	13:29:10	52	65	49	62	52	49	46	48	46	43	36
26/10/2019	13:34:10	53	62	49	62	51	45	45	48	46	40	30
26/10/2019	13:39:10	52	60	49	62	53	47	47	49	47	41	34
26/10/2019	13:44:10	53	60	49	62	52	48	47	49	47	41	32
26/10/2019	13:49:10	53	60	50	62	57	46	45	47	44	38	30
26/10/2019	13:54:10	51	61	48	62	51	47	48	49	47	41	32
26/10/2019	13:59:10	53	77	48	62	50	47	46	48	46	41	36
26/10/2019	14:04:10	52	62	50	63	52	49	47	48	46	44	38
26/10/2019	14:09:10	53	62	50	62	52	51	47	48	47	44	37

Our Ref: J002716
Client: Complete Sustainability Solutions Ltd
Project: Edge Lane, Openshaw
Results: Measurement Position 3

		Octave Band Centre Frequencies (Hz), dB L _{eq}										
Date	Time	dB, L _{Aeq}	dB, L _{Amax}	dB, L _{A90}	63	125	250	500	1k	2k	4k	8k
26/10/2019	14:14:10	54	60	52	62	52	49	48	49	47	44	38
26/10/2019	14:19:10	54	61	49	62	54	51	49	50	48	44	37
26/10/2019	14:24:10	54	63	49	63	57	53	50	49	47	43	36
26/10/2019	14:29:10	54	64	51	62	51	50	46	48	47	43	34
26/10/2019	14:34:10	53	57	51	64	55	52	48	49	48	45	45
26/10/2019	14:39:10	55	66	52	63	57	51	48	48	47	44	40
26/10/2019	14:44:10	54	63	51	63	53	49	49	51	49	46	40
26/10/2019	14:49:10	55	68	51	60	51	50	50	51	50	47	42
26/10/2019	14:54:10	56	64	48	62	54	53	49	50	49	46	40
26/10/2019	14:59:10	55	63	51	61	52	50	47	47	45	39	35
26/10/2019	15:04:10	52	63	48	63	57	53	49	48	45	41	33
26/10/2019	15:09:10	53	63	49	62	52	51	47	48	47	43	36
26/10/2019	15:14:10	53	65	50	62	53	52	47	48	46	42	36
26/10/2019	15:19:10	53	63	51	63	53	47	47	49	46	39	30
26/10/2019	15:24:10	53	64	50	61	51	46	45	47	44	37	30
26/10/2019	15:29:10	51	60	48	63	51	46	46	48	45	38	32
26/10/2019	15:34:10	51	61	48	62	53	48	47	49	46	38	29
26/10/2019	15:39:10	52	70	48	63	52	46	45	47	44	36	27
26/10/2019	15:44:10	51	57	48	62	52	47	47	49	45	37	28
26/10/2019	15:49:10	52	64	49	61	50	48	47	49	46	42	35
26/10/2019	15:54:10	53	62	49	62	52	48	47	49	46	42	35
26/10/2019	15:59:10	53	67	49	61	52	46	45	48	44	37	30
26/10/2019	16:04:10	51	58	48	61	49	46	46	48	45	38	33
26/10/2019	16:09:10	52	62	48	62	51	48	47	49	46	39	33
26/10/2019	16:14:10	52	62	48	63	57	54	51	50	49	44	38
26/10/2019	16:19:10	55	67	51	61	52	47	47	49	45	38	30
26/10/2019	16:24:10	52	59	50	61	49	46	46	48	44	35	27
26/10/2019	16:29:10	51	58	48	61	50	47	48	49	45	36	26
26/10/2019	16:34:10	52	65	48	62	54	52	49	49	45	38	33
26/10/2019	16:39:10	53	64	49	60	52	48	47	48	44	38	28
26/10/2019	16:44:10	52	60	49	63	56	53	51	50	46	37	30
26/10/2019	16:49:10	54	71	49	62	55	54	50	48	44	35	26
26/10/2019	16:54:10	53	64	49	59	49	45	46	48	43	34	27
26/10/2019	16:59:10	51	65	48	59	49	45	46	51	52	40	35
26/10/2019	17:04:10	56	67	48	61	52	51	49	52	56	45	40
26/10/2019	17:09:10	59	70	50	61	52	49	47	48	47	36	28
26/10/2019	17:14:10	53	64	48	61	55	50	47	49	45	35	26
26/10/2019	17:19:10	52	61	49	63	56	52	49	51	46	38	26
26/10/2019	17:24:10	54	78	50	61	55	52	51	51	51	46	41
26/10/2019	17:29:10	57	75	50	61	55	53	51	51	48	45	41
26/10/2019	17:34:10	55	64	50	59	49	50	49	50	47	43	37
26/10/2019	17:39:10	54	62	51	61	52	50	47	49	46	40	32
26/10/2019	17:44:10	53	62	51	60	49	47	47	49	45	38	32
26/10/2019	17:49:10	52	57	50	61	53	50	48	49	44	39	32
26/10/2019	17:54:10	52	61	49	60	54	48	47	49	44	34	28
26/10/2019	17:59:10	52	61	49	62	55	54	51	50	46	38	31
26/10/2019	18:04:10	54	67	51	61	53	52	48	49	44	32	25
26/10/2019	18:09:10	52	62	50	62	51	48	46	49	43	31	22
26/10/2019	18:14:10	51	57	49	63	55	56	57	53	46	35	25
26/10/2019	18:19:10	57	85	50	61	55	52	49	49	44	31	20
26/10/2019	18:24:10	53	67	50	63	54	52	49	49	44	32	23
26/10/2019	18:29:10	53	71	50	60	53	55	49	50	45	34	22
26/10/2019	18:34:10	54	80	50	61	52	51	48	50	44	33	22
26/10/2019	18:39:10	53	65	50	61	52	52	49	50	46	36	26
26/10/2019	18:44:10	53	65	51	60	51	50	47	49	44	33	23
26/10/2019	18:49:10	52	58	50	59	50	49	46	48	42	30	21
26/10/2019	18:54:10	51	64	49	59	50	48	46	48	42	30	22
26/10/2019	18:59:10	51	56	49	59	51	50	48	49	43	31	24
26/10/2019	19:04:10	52	66	49	60	52	57	52	51	45	33	20
26/10/2019	19:09:10	55	82	50	60	51	49	48	50	44	33	24
26/10/2019	19:14:10	52	58	51	61	50	48	47	49	43	32	24
26/10/2019	19:19:10	52	59	50	59	49	48	46	48	43	32	23
26/10/2019	19:24:10	51	57	50	59	51	49	47	49	44	33	23
26/10/2019	19:29:10	52	59	50	59	51	51	47	49	44	32	21
26/10/2019	19:34:10	52	71	50	59	49	49	48	49	44	30	20
26/10/2019	19:39:10	52	60	50	59	50	49	46	48	43	30	19
26/10/2019	19:44:10	51	62	49	59	49	47	46	47	41	27	17
26/10/2019	19:49:10	50	57	47	59	48	47	46	48	42	27	17
26/10/2019	19:54:10	51	56	48	58	53	49	47	48	42	28	18
26/10/2019	19:59:10	51	66	47	59	48	49	47	48	42	29	18
26/10/2019	20:04:10	51	61	49	58	49	48	46	48	42	29	18
26/10/2019	20:09:10	51	61	48	59	49	51	51	49	41	28	18
26/10/2019	20:14:10	53	70	48	60	51	50	49	49	43	29	18

Our Ref: J002716
Client: Complete Sustainability Solutions Ltd
Project: Edge Lane, Openshaw
Results: Measurement Position 3

		Octave Band Centre Frequencies (Hz), dB L _{eq}										
Date	Time	dB, L _{Aeq}	dB, L _{Amax}	dB, L _{A90}	63	125	250	500	1k	2k	4k	8k
26/10/2019	20:19:10	52	73	48	58	49	47	45	48	42	31	21
26/10/2019	20:24:10	50	57	48	60	50	48	46	48	43	34	25
26/10/2019	20:29:10	51	63	49	59	49	46	44	47	42	35	28
26/10/2019	20:34:10	50	56	48	59	49	47	45	47	42	35	27
26/10/2019	20:39:10	50	58	48	64	58	54	55	52	44	33	22
26/10/2019	20:44:10	56	75	47	58	47	47	46	47	41	27	19
26/10/2019	20:49:10	50	60	47	58	47	48	47	49	42	28	18
26/10/2019	20:54:10	51	74	49	57	47	47	46	48	41	28	18
26/10/2019	20:59:10	50	62	48	57	49	52	57	54	46	31	18
26/10/2019	21:04:10	57	77	48	58	49	48	46	48	43	31	20
26/10/2019	21:09:10	51	61	48	58	50	48	48	50	47	37	23
26/10/2019	21:14:10	53	67	49	58	50	49	46	49	45	35	24
26/10/2019	21:19:10	52	67	49	58	51	49	46	48	42	31	21
26/10/2019	21:24:10	51	56	49	58	49	48	46	48	42	32	22
26/10/2019	21:29:10	51	65	49	57	49	49	47	48	42	30	19
26/10/2019	21:34:10	51	56	49	59	50	49	47	49	43	30	21
26/10/2019	21:39:10	51	63	50	59	50	49	47	49	43	31	21
26/10/2019	21:44:10	51	60	49	60	51	49	46	49	43	30	21
26/10/2019	21:49:10	51	57	49	58	49	47	45	48	42	30	21
26/10/2019	21:54:10	50	56	48	58	48	47	44	47	42	30	21
26/10/2019	21:59:10	50	58	48	57	46	46	44	47	41	32	23
26/10/2019	22:04:10	49	61	46	56	46	46	44	46	40	26	18
26/10/2019	22:09:10	49	57	47	57	51	47	45	47	42	34	23
26/10/2019	22:14:10	50	58	48	58	50	47	45	48	43	31	19
26/10/2019	22:19:10	50	71	48	57	47	46	45	47	41	27	17
26/10/2019	22:24:10	50	56	47	59	48	47	44	47	42	28	18
26/10/2019	22:29:10	50	55	47	57	49	49	48	48	43	31	20
26/10/2019	22:34:10	51	61	48	56	47	46	44	47	40	28	22
26/10/2019	22:39:10	49	54	47	57	47	46	43	46	40	28	22
26/10/2019	22:44:10	48	54	47	56	46	46	45	47	42	31	22
26/10/2019	22:49:10	50	58	48	59	51	47	44	47	42	30	22
26/10/2019	22:54:10	50	57	48	60	55	51	46	48	42	32	25
26/10/2019	22:59:10	51	60	48	57	48	48	45	47	41	29	22
26/10/2019	23:04:10	49	58	48	57	48	47	45	47	42	30	22
26/10/2019	23:09:10	50	57	48	56	47	47	45	47	42	30	20
26/10/2019	23:14:10	50	65	47	56	50	49	46	46	40	26	17
26/10/2019	23:19:10	49	60	46	57	50	48	45	46	39	25	19
26/10/2019	23:24:10	49	59	46	56	50	49	45	46	40	26	18
26/10/2019	23:29:10	49	56	47	55	45	45	44	45	38	23	16
26/10/2019	23:34:10	48	52	46	55	45	44	43	45	38	22	16
26/10/2019	23:39:10	48	54	45	57	47	45	43	45	40	27	18
26/10/2019	23:44:10	48	53	46	58	46	46	43	45	39	28	22
26/10/2019	23:49:10	48	60	46	59	55	51	45	46	40	27	19
26/10/2019	23:54:10	50	62	46	54	46	45	43	46	40	29	23
26/10/2019	23:59:10	48	55	45	54	45	44	42	46	40	27	19
27/10/2019	00:04:10	48	55	44	55	48	45	43	45	40	29	19
27/10/2019	00:09:10	48	57	46	55	48	46	46	48	42	31	21
27/10/2019	00:14:10	50	65	46	55	48	46	44	46	40	27	20
27/10/2019	00:19:10	48	55	46	55	50	47	44	46	41	29	21
27/10/2019	00:24:10	49	56	47	57	47	46	44	46	40	27	19
27/10/2019	00:29:10	49	55	46	55	45	45	43	45	39	25	18
27/10/2019	00:34:10	48	54	46	57	50	49	45	47	41	26	16
27/10/2019	00:39:10	50	64	46	56	47	45	43	45	39	26	18
27/10/2019	00:44:10	48	54	46	57	54	48	45	46	40	24	16
27/10/2019	00:49:10	49	55	46	56	47	45	43	46	39	22	16
27/10/2019	00:54:10	48	57	46	54	45	45	43	45	38	29	24
27/10/2019	00:59:10	48	54	45	54	46	46	44	46	39	31	26
27/10/2019	01:04:10	48	55	46	54	44	43	41	44	37	20	16
27/10/2019	01:09:10	46	52	44	59	52	51	46	43	38	29	21
27/10/2019	01:14:10	48	64	43	53	44	43	42	43	39	35	30
27/10/2019	01:19:10	47	57	43	55	44	45	43	43	40	36	31
27/10/2019	01:24:10	47	61	43	54	43	43	42	45	41	37	32
27/10/2019	01:29:10	48	58	44	53	43	42	40	42	36	28	23
27/10/2019	01:34:10	45	50	43	53	44	45	42	42	35	25	20
27/10/2019	01:39:10	45	54	42	55	44	44	41	43	38	25	18
27/10/2019	01:44:10	46	54	43	55	44	43	41	45	39	28	18
27/10/2019	01:49:10	47	59	44	56	44	43	41	43	37	24	17
27/10/2019	01:54:10	46	53	43	54	45	45	43	44	39	30	20
27/10/2019	01:59:10	47	54	43	53	43	43	42	44	38	25	17
27/10/2019	02:04:10	46	62	43	55	45	44	42	44	38	27	18
27/10/2019	02:09:10	46	60	44	55	45	46	44	47	45	31	20
27/10/2019	02:14:10	51	68	44	53	45	43	41	44	38	23	17
27/10/2019	02:19:10	46	53	44	53	43	43	41	44	37	25	17

Our Ref: J002716
Client: Complete Sustainability Solutions Ltd
Project: Edge Lane, Openshaw
Results: Measurement Position 3

		Octave Band Centre Frequencies (Hz), dB L _{eq}										
Date	Time	dB, L _{Aeq}	dB, L _{Amax}	dB, L _{A90}	63	125	250	500	1k	2k	4k	8k
27/10/2019	02:24:10	46	56	44	53	43	42	41	43	37	23	16
27/10/2019	02:29:10	46	54	43	52	42	42	40	43	36	22	16
27/10/2019	02:34:10	45	52	42	52	42	42	40	43	36	21	16
27/10/2019	02:39:10	45	52	42	54	43	42	40	43	36	19	15
27/10/2019	02:44:10	45	55	42	52	43	42	40	42	36	27	22
27/10/2019	02:49:10	45	53	42	54	44	42	41	44	39	32	27
27/10/2019	02:54:10	47	54	44	52	43	43	41	44	40	36	31
27/10/2019	02:59:10	47	56	42	51	42	41	41	43	41	37	31
27/10/2019	03:04:10	47	56	44	52	41	41	39	42	36	30	26
27/10/2019	03:09:10	45	54	42	53	42	40	39	42	36	27	23
27/10/2019	03:14:10	44	52	41	51	42	40	38	40	33	23	19
27/10/2019	03:19:10	43	50	41	53	44	42	40	42	35	24	19
27/10/2019	03:24:10	44	52	42	54	43	42	40	41	35	23	17
27/10/2019	03:29:10	44	51	42	52	43	42	40	42	35	24	17
27/10/2019	03:34:10	45	53	42	54	44	43	41	43	39	31	21
27/10/2019	03:39:10	46	56	42	53	45	42	40	43	37	21	16
27/10/2019	03:44:10	45	61	42	53	45	43	40	43	36	22	16
27/10/2019	03:49:10	45	51	43	52	43	42	40	42	35	21	16
27/10/2019	03:54:10	44	51	42	52	43	43	41	43	36	22	16
27/10/2019	03:59:10	45	50	42	52	43	43	41	44	37	22	16
27/10/2019	04:04:10	46	52	43	52	43	43	41	44	37	31	29
27/10/2019	04:09:10	46	52	44	51	42	43	41	43	36	22	16
27/10/2019	04:14:10	46	53	43	52	43	43	41	43	36	20	16
27/10/2019	04:19:10	45	55	43	52	43	43	40	43	36	21	16
27/10/2019	04:24:10	45	53	42	51	43	44	41	43	35	20	15
27/10/2019	04:29:10	45	52	43	51	43	43	41	44	37	20	15
27/10/2019	04:34:10	46	52	44	51	43	43	41	44	37	21	16
27/10/2019	04:39:10	46	54	43	51	42	42	40	43	37	31	26
27/10/2019	04:44:10	46	53	42	52	42	42	41	42	37	31	26
27/10/2019	04:49:10	45	50	43	51	44	45	42	44	38	26	20
27/10/2019	04:54:10	47	55	44	52	44	42	40	43	37	23	19
27/10/2019	04:59:10	45	53	43	51	42	42	40	43	37	23	18
27/10/2019	05:04:10	46	57	42	51	43	42	40	42	36	25	19
27/10/2019	05:09:10	45	53	42	54	52	45	41	43	36	26	18
27/10/2019	05:14:10	46	51	43	52	42	42	40	42	35	22	17
27/10/2019	05:19:10	44	51	42	52	41	41	39	42	36	22	17
27/10/2019	05:24:10	44	53	41	51	42	42	40	44	38	26	20
27/10/2019	05:29:10	46	57	43	51	42	41	39	42	38	33	28
27/10/2019	05:34:10	45	52	41	50	41	41	39	41	35	24	20
27/10/2019	05:39:10	44	52	41	52	43	41	39	41	36	25	19
27/10/2019	05:44:10	44	58	41	51	42	42	39	41	34	22	18
27/10/2019	05:49:10	43	54	41	52	42	42	39	41	35	22	18
27/10/2019	05:54:10	44	50	42	51	42	42	39	41	34	20	17
27/10/2019	05:59:10	44	52	42	51	43	42	39	42	35	21	17
27/10/2019	06:04:10	44	56	41	51	43	42	40	42	35	23	16
27/10/2019	06:09:10	44	52	41	50	42	42	39	41	33	20	16
27/10/2019	06:14:10	43	49	41	51	42	42	40	43	36	21	16
27/10/2019	06:19:10	45	52	42	53	43	43	41	43	36	21	17
27/10/2019	06:24:10	45	52	43	53	44	44	41	43	37	28	19
27/10/2019	06:29:10	46	55	43	52	46	46	42	43	36	22	16
27/10/2019	06:34:10	46	52	43	53	43	45	41	44	38	28	19
27/10/2019	06:39:10	46	54	44	54	44	44	42	44	37	22	16
27/10/2019	06:44:10	46	54	43	53	44	44	41	45	38	23	16
27/10/2019	06:49:10	47	53	43	55	46	45	42	44	37	22	16
27/10/2019	06:54:10	46	54	42	54	44	43	41	44	38	24	18
27/10/2019	06:59:10	46	60	43	52	45	44	41	43	37	26	24
27/10/2019	07:04:10	46	55	44	58	53	50	45	45	39	28	39
27/10/2019	07:09:10	49	57	46	53	47	46	41	44	37	22	19
27/10/2019	07:14:10	46	52	44	54	48	45	42	44	38	23	19
27/10/2019	07:19:10	47	52	44	53	45	45	42	46	40	36	34
27/10/2019	07:24:10	49	64	45	53	43	44	41	44	36	26	33
27/10/2019	07:29:10	46	61	43	53	46	46	42	44	38	30	35
27/10/2019	07:34:10	47	62	45	54	46	46	43	45	40	28	32
27/10/2019	07:39:10	48	60	45	53	47	46	43	45	38	32	32
27/10/2019	07:44:10	48	60	45	54	47	48	44	46	42	36	30
27/10/2019	07:49:10	50	61	46	54	46	46	44	46	40	40	38
27/10/2019	07:54:10	49	60	46	54	45	45	43	45	39	36	37
27/10/2019	07:59:10	48	64	45	54	45	46	43	46	40	32	24
27/10/2019	08:04:10	48	58	45	55	51	52	47	47	42	38	33
27/10/2019	08:09:10	51	67	47	55	51	49	46	47	42	35	35
27/10/2019	08:14:10	50	57	48	54	46	46	44	46	41	30	29
27/10/2019	08:19:10	49	57	47	56	48	47	45	47	43	32	27
27/10/2019	08:24:10	50	59	47	56	48	47	45	47	42	32	32

Our Ref: J002716
Client: Complete Sustainability Solutions Ltd
Project: Edge Lane, Openshaw
Results: Measurement Position 3

		Octave Band Centre Frequencies (Hz), dB L _{eq}										
Date	Time	dB, L _{Aeq}	dB, L _{Amax}	dB, L _{A90}	63	125	250	500	1k	2k	4k	8k
27/10/2019	08:29:10	50	60	48	55	47	47	45	46	40	31	24
27/10/2019	08:34:10	49	56	47	57	52	50	47	48	42	33	24
27/10/2019	08:39:10	51	58	48	55	49	48	45	47	41	27	18
27/10/2019	08:44:10	50	57	48	58	52	51	50	51	45	35	30
27/10/2019	08:49:10	54	67	48	58	48	48	46	47	42	37	34
27/10/2019	08:54:10	50	60	48	58	50	50	47	47	41	33	26
27/10/2019	08:59:10	50	59	47	60	54	51	48	47	42	35	30
27/10/2019	09:04:10	51	61	49	57	50	48	46	47	41	32	22
27/10/2019	09:09:10	50	57	48	58	49	48	46	48	43	33	27
27/10/2019	09:14:10	51	62	48	57	49	48	46	47	42	31	22
27/10/2019	09:19:10	50	58	48	58	51	51	48	48	43	35	27
27/10/2019	09:24:10	52	62	49	57	52	51	47	47	41	37	31
27/10/2019	09:29:10	51	59	48	59	48	48	46	47	42	36	26
27/10/2019	09:34:10	50	57	48	60	50	48	47	48	43	36	28
27/10/2019	09:39:10	51	60	48	59	53	49	47	48	43	35	27
27/10/2019	09:44:10	51	57	48	58	50	47	45	47	41	33	27
27/10/2019	09:49:10	50	57	47	58	49	48	46	48	44	34	27
27/10/2019	09:54:10	51	58	49	59	49	48	46	47	43	32	24
27/10/2019	09:59:10	50	57	48	60	51	48	47	48	44	34	24
27/10/2019	10:04:10	51	61	49	59	54	48	46	47	41	31	24
27/10/2019	10:09:10	50	57	47	60	52	49	46	48	44	34	24
27/10/2019	10:14:10	51	57	48	59	49	49	49	51	49	45	39
27/10/2019	10:19:10	55	62	48	58	52	51	49	50	47	39	32
27/10/2019	10:24:10	54	66	48	59	50	49	49	49	47	44	39
27/10/2019	10:29:10	54	62	48	60	51	47	46	47	43	37	30
27/10/2019	10:34:10	51	63	47	59	54	51	47	46	41	32	23
27/10/2019	10:39:10	50	60	46	58	49	46	44	47	43	34	23
27/10/2019	10:44:10	50	56	47	59	51	51	46	47	43	36	30
27/10/2019	10:49:10	51	60	48	60	51	48	46	47	44	38	30
27/10/2019	10:54:10	51	58	48	60	52	46	46	48	44	38	30
27/10/2019	10:59:10	51	58	48	60	50	47	47	49	45	36	27
27/10/2019	11:04:10	52	64	49	62	52	47	46	48	44	37	29
27/10/2019	11:09:10	51	59	48	60	50	46	46	48	45	35	26
27/10/2019	11:14:10	52	60	49	67	62	53	47	49	45	36	26
27/10/2019	11:19:10	53	63	49	59	48	46	45	47	42	34	26
27/10/2019	11:24:10	50	56	47	58	49	49	46	47	43	38	26
27/10/2019	11:29:10	51	64	48	60	53	49	47	49	45	36	27
27/10/2019	11:34:10	52	59	49	62	52	49	48	50	46	39	31
27/10/2019	11:39:10	53	71	50	63	54	54	49	49	44	35	27
27/10/2019	11:44:10	53	61	50	60	54	53	49	50	47	42	36
27/10/2019	11:49:10	54	72	50	64	53	51	50	52	50	46	40
27/10/2019	11:54:10	56	64	52	62	52	50	49	51	48	42	37
27/10/2019	11:59:10	54	62	51	64	51	50	48	49	47	41	33
27/10/2019	12:04:10	53	66	51	64	55	55	49	49	45	38	32
27/10/2019	12:09:10	53	68	51	61	51	48	47	48	44	34	26
27/10/2019	12:14:10	51	68	49	63	52	49	48	49	45	35	26
27/10/2019	12:19:10	52	58	50	63	52	47	47	50	45	35	28
27/10/2019	12:24:10	53	63	49	63	52	51	51	52	49	44	38
27/10/2019	12:29:10	56	64	52	62	51	51	50	51	50	44	38
27/10/2019	12:34:10	56	79	51	62	54	52	48	50	47	40	33
27/10/2019	12:39:10	54	66	52	62	51	48	47	50	45	35	28
27/10/2019	12:44:10	52	65	50	63	54	54	51	52	49	44	37
27/10/2019	12:49:10	56	62	52	63	54	51	51	52	49	43	34
27/10/2019	12:54:10	56	69	52	63	53	53	48	50	46	39	31
27/10/2019	12:59:10	54	60	52	63	51	52	49	50	46	39	32
27/10/2019	13:04:10	54	62	51	62	51	51	47	49	45	38	30
27/10/2019	13:09:10	53	63	51	62	59	49	48	50	47	38	30
27/10/2019	13:14:10	54	64	51	62	51	49	49	50	47	42	35
27/10/2019	13:19:10	54	69	50	61	52	50	50	51	48	44	38
27/10/2019	13:24:10	55	62	51	61	52	50	48	50	46	38	31
27/10/2019	13:29:10	53	64	51	62	51	48	49	51	47	42	35
27/10/2019	13:34:10	54	63	51	64	55	52	48	50	47	43	36
27/10/2019	13:39:10	54	65	50	64	58	56	52	52	52	43	35
27/10/2019	13:44:10	57	79	53	61	55	55	50	50	47	43	35
27/10/2019	13:49:10	55	64	51	64	51	49	48	50	46	41	33
27/10/2019	13:54:10	54	61	50	63	52	49	49	50	46	39	32
27/10/2019	13:59:10	53	60	51	62	52	47	47	49	45	38	25
27/10/2019	14:04:10	52	58	50	65	53	52	49	49	45	40	29
27/10/2019	14:09:10	53	64	50	64	53	51	49	50	47	43	34
27/10/2019	14:14:10	54	60	50	63	52	48	48	50	47	42	35
27/10/2019	14:19:10	54	60	50	61	52	50	51	52	50	46	39
27/10/2019	14:24:10	56	66	52	62	51	51	51	52	50	46	40
27/10/2019	14:29:10	57	65	52	64	54	51	49	50	46	40	35

Our Ref: J002716
Client: Complete Sustainability Solutions Ltd
Project: Edge Lane, Openshaw
Results: Measurement Position 3

		Octave Band Centre Frequencies (Hz), dB L _{eq}										
Date	Time	dB, L _{Aeq}	dB, L _{Amax}	dB, L _{A90}	63	125	250	500	1k	2k	4k	8k
27/10/2019	14:34:10	54	63	51	63	52	51	48	51	47	40	32
27/10/2019	14:39:10	54	62	51	61	51	49	47	50	46	36	26
27/10/2019	14:44:10	53	65	50	66	56	55	50	50	45	35	27
27/10/2019	14:49:10	54	64	51	64	52	50	49	50	45	35	26
27/10/2019	14:54:10	53	68	50	63	50	49	46	50	44	33	24
27/10/2019	14:59:10	52	77	49	67	58	54	51	50	45	34	26
27/10/2019	15:04:10	54	65	50	62	56	53	52	52	49	45	39
27/10/2019	15:09:10	56	64	52	62	54	54	50	51	48	44	38
27/10/2019	15:14:10	55	63	51	60	50	51	49	50	48	43	36
27/10/2019	15:19:10	55	62	51	65	55	53	51	52	49	45	39
27/10/2019	15:24:10	56	61	54	62	53	52	51	52	49	44	36
27/10/2019	15:29:10	56	63	52	62	52	51	50	50	47	42	35
27/10/2019	15:34:10	54	66	50	61	53	52	49	50	47	40	33
27/10/2019	15:39:10	54	60	51	62	53	50	48	50	51	43	34
27/10/2019	15:44:10	55	82	49	60	52	49	48	49	46	40	33
27/10/2019	15:49:10	53	66	49	63	51	50	49	50	47	41	33
27/10/2019	15:54:10	54	65	51	60	53	52	48	50	47	43	36
27/10/2019	15:59:10	54	60	51	62	53	50	48	49	46	45	42
27/10/2019	16:04:10	54	69	50	64	57	52	51	50	47	43	35
27/10/2019	16:09:10	55	68	51	61	52	49	47	48	44	36	27
27/10/2019	16:14:10	52	61	50	61	51	49	47	49	45	37	28
27/10/2019	16:19:10	52	60	50	61	53	50	47	49	45	39	32
27/10/2019	16:24:10	53	65	50	62	55	52	49	50	47	42	35
27/10/2019	16:29:10	54	62	50	61	53	51	49	51	51	46	39
27/10/2019	16:34:10	56	70	51	59	50	50	46	48	45	38	33
27/10/2019	16:39:10	52	61	50	62	51	49	47	49	46	38	35
27/10/2019	16:44:10	52	70	50	62	54	51	48	49	45	36	32
27/10/2019	16:49:10	53	65	50	63	54	51	48	49	45	37	27
27/10/2019	16:54:10	53	70	49	61	59	50	47	48	44	32	22
27/10/2019	16:59:10	52	70	48	60	50	49	47	48	45	39	31
27/10/2019	17:04:10	52	60	48	61	54	52	50	50	48	43	37
27/10/2019	17:09:10	55	61	50	60	54	55	52	51	48	44	39
27/10/2019	17:14:10	56	67	50	60	51	51	50	50	48	44	37
27/10/2019	17:19:10	55	62	50	60	51	51	47	49	45	38	30
27/10/2019	17:24:10	53	64	51	59	56	50	47	49	44	35	26
27/10/2019	17:29:10	52	61	49	59	59	50	47	48	43	30	24
27/10/2019	17:34:10	52	61	48	58	52	47	46	48	42	31	23
27/10/2019	17:39:10	51	59	47	58	50	50	52	50	48	46	41
27/10/2019	17:44:10	55	61	50	58	50	48	46	48	44	34	29
27/10/2019	17:49:10	51	66	47	57	56	47	45	47	45	41	33
27/10/2019	17:54:10	51	67	47	58	49	49	44	46	40	28	20
27/10/2019	17:59:10	49	59	46	58	51	51	53	49	45	35	21
27/10/2019	18:04:10	54	83	47	58	50	47	45	46	40	27	18
27/10/2019	18:09:10	49	61	46	59	52	47	44	46	42	29	20
27/10/2019	18:14:10	49	61	47	61	52	48	45	46	39	27	20
27/10/2019	18:19:10	49	59	46	58	58	56	52	50	45	36	23
27/10/2019	18:24:10	55	86	45	57	51	50	48	47	42	31	20
27/10/2019	18:29:10	51	75	46	55	49	49	48	47	43	30	19
27/10/2019	18:34:10	51	77	46	58	59	47	44	48	48	29	17
27/10/2019	18:39:10	53	64	47	58	49	46	44	52	50	32	19
27/10/2019	18:44:10	55	73	47	60	54	51	52	50	43	29	20
27/10/2019	18:49:10	54	74	47	56	48	45	43	48	45	36	19
27/10/2019	18:54:10	51	63	45	58	51	48	45	53	48	34	19
27/10/2019	18:59:10	55	76	47	58	51	46	45	47	40	26	18
27/10/2019	19:04:10	49	58	47	59	51	48	45	47	41	30	25
27/10/2019	19:09:10	50	58	47	57	51	55	50	49	46	35	19
27/10/2019	19:14:10	54	84	46	58	53	55	50	49	45	34	21
27/10/2019	19:19:10	53	83	47	55	47	46	44	46	40	26	18
27/10/2019	19:24:10	49	57	47	58	55	52	46	47	40	28	19
27/10/2019	19:29:10	50	62	47	57	50	47	45	47	41	29	19
27/10/2019	19:34:10	50	62	47	57	51	49	47	47	41	29	20
27/10/2019	19:39:10	50	61	47	56	50	50	45	46	41	29	18
27/10/2019	19:44:10	49	62	47	58	50	55	49	49	43	32	21
27/10/2019	19:49:10	53	82	46	56	48	48	44	44	40	26	19
27/10/2019	19:54:10	48	71	45	57	52	48	44	45	39	27	19
27/10/2019	19:59:10	48	66	46	57	48	47	44	46	40	27	20
27/10/2019	20:04:10	49	58	47	59	51	48	45	46	40	27	18
27/10/2019	20:09:10	49	64	46	60	53	48	44	46	40	29	20
27/10/2019	20:14:10	49	62	47	57	50	48	44	45	39	26	20
27/10/2019	20:19:10	48	56	46	59	52	53	50	47	43	34	21
27/10/2019	20:24:10	52	66	47	55	47	47	44	45	40	28	18
27/10/2019	20:29:10	48	65	46	57	49	48	46	45	40	28	19
27/10/2019	20:34:10	49	66	46	57	49	47	46	45	40	26	17

Our Ref: J002716
Client: Complete Sustainability Solutions Ltd
Project: Edge Lane, Openshaw
Results: Measurement Position 3

		Octave Band Centre Frequencies (Hz), dB L _{eq}										
Date	Time	dB, L _{Aeq}	dB, L _{Amax}	dB, L _{A90}	63	125	250	500	1k	2k	4k	8k
27/10/2019	20:39:10	49	65	45	57	49	47	45	46	41	28	18
27/10/2019	20:44:10	49	67	45	56	48	47	43	44	39	27	19
27/10/2019	20:49:10	48	61	45	57	51	49	45	45	39	25	16
27/10/2019	20:54:10	48	60	45	55	54	59	52	49	45	38	24
27/10/2019	20:59:10	55	87	45	58	53	55	50	47	43	34	21
27/10/2019	21:04:10	52	82	46	57	49	47	45	45	39	27	18
27/10/2019	21:09:10	48	60	46	57	51	51	47	45	39	25	19
27/10/2019	21:14:10	49	60	46	56	50	48	45	44	38	26	19
27/10/2019	21:19:10	48	66	45	55	52	48	44	43	37	25	18
27/10/2019	21:24:10	47	59	44	55	48	47	43	44	37	24	18
27/10/2019	21:29:10	47	60	44	59	55	53	48	46	41	26	17
27/10/2019	21:34:10	51	76	46	55	49	48	47	44	39	24	17
27/10/2019	21:39:10	48	67	45	55	50	46	43	43	37	23	19
27/10/2019	21:44:10	47	59	44	56	53	49	49	45	40	26	19
27/10/2019	21:49:10	50	69	45	56	47	47	44	45	40	28	19
27/10/2019	21:54:10	48	61	46	54	48	48	47	46	40	28	19
27/10/2019	21:59:10	49	74	45	56	50	48	45	47	49	47	20
27/10/2019	22:04:10	54	67	46	57	59	51	44	44	39	24	17
27/10/2019	22:09:10	49	59	46	55	48	49	45	45	40	27	18
27/10/2019	22:14:10	49	61	45	58	55	52	47	45	40	25	17
27/10/2019	22:19:10	50	61	46	56	51	49	46	46	42	33	22
27/10/2019	22:24:10	50	63	45	55	50	49	43	43	38	27	18
27/10/2019	22:29:10	47	62	44	56	55	62	55	53	50	42	30
27/10/2019	22:34:10	58	87	44	55	47	47	44	45	39	26	18
27/10/2019	22:39:10	48	57	45	55	48	47	44	45	40	31	22
27/10/2019	22:44:10	48	60	45	55	46	44	42	42	36	25	18
27/10/2019	22:49:10	46	58	43	55	46	47	45	43	37	26	18
27/10/2019	22:54:10	47	61	44	54	47	45	43	44	38	26	19
27/10/2019	22:59:10	47	55	44	55	46	44	43	45	42	29	17
27/10/2019	23:04:10	48	60	44	54	46	44	43	44	39	25	17
27/10/2019	23:09:10	47	53	45	58	55	53	51	54	53	43	34
27/10/2019	23:14:10	58	70	49	61	55	53	52	55	54	45	40
27/10/2019	23:19:10	59	71	46	54	47	44	43	44	38	25	19
27/10/2019	23:24:10	47	52	44	55	50	44	44	45	41	29	18
27/10/2019	23:29:10	48	52	47	55	49	45	43	44	39	27	17
27/10/2019	23:34:10	47	53	44	58	45	44	42	44	37	21	15
27/10/2019	23:39:10	46	54	43	55	44	43	42	43	36	21	16
27/10/2019	23:44:10	46	57	42	54	45	43	41	43	36	19	15
27/10/2019	23:49:10	45	54	42	55	46	44	43	44	37	19	15
27/10/2019	23:54:10	46	59	44	56	46	44	41	42	35	21	16
27/10/2019	23:59:10	45	59	42	56	47	46	44	43	37	23	16
28/10/2019	00:04:10	47	61	43	53	45	43	42	42	36	20	15
28/10/2019	00:09:10	45	58	43	58	56	50	44	41	34	19	15
28/10/2019	00:14:10	47	58	42	53	44	44	42	42	35	18	15
28/10/2019	00:19:10	45	54	42	51	43	42	41	40	32	16	15
28/10/2019	00:24:10	43	52	42	53	44	41	40	41	32	17	15
28/10/2019	00:29:10	43	51	41	53	44	44	44	43	36	19	15
28/10/2019	00:34:10	46	55	42	54	45	44	42	42	35	19	15
28/10/2019	00:39:10	45	58	42	52	44	42	43	44	36	23	16
28/10/2019	00:44:10	46	63	43	53	44	41	40	42	35	19	15
28/10/2019	00:49:10	44	55	41	52	44	42	42	42	34	18	15
28/10/2019	00:54:10	45	51	42	53	45	43	43	42	36	20	15
28/10/2019	00:59:10	45	61	42	51	43	41	40	40	32	18	15
28/10/2019	01:04:10	43	52	41	54	46	44	44	43	36	18	15
28/10/2019	01:09:10	46	53	42	53	50	45	44	43	41	27	17
28/10/2019	01:14:10	47	58	45	52	45	43	41	41	37	21	16
28/10/2019	01:19:10	45	53	41	52	44	42	42	41	37	19	15
28/10/2019	01:24:10	45	52	42	50	42	40	40	40	32	17	15
28/10/2019	01:29:10	43	50	40	58	53	47	42	40	33	18	15
28/10/2019	01:34:10	45	57	41	52	43	41	40	39	33	18	15
28/10/2019	01:39:10	43	50	41	53	44	43	41	41	34	18	15
28/10/2019	01:44:10	44	52	42	51	42	40	40	40	31	16	15
28/10/2019	01:49:10	42	49	40	49	42	41	42	42	35	19	15
28/10/2019	01:54:10	45	61	41	49	42	40	41	40	31	16	15
28/10/2019	01:59:10	43	49	41	49	41	39	39	39	31	16	15
28/10/2019	02:04:10	42	49	40	51	42	40	40	40	31	16	15
28/10/2019	02:09:10	42	51	40	55	46	41	41	41	33	17	15
28/10/2019	02:14:10	44	52	41	53	49	42	42	41	36	26	16
28/10/2019	02:19:10	45	58	41	50	42	41	40	40	33	21	15
28/10/2019	02:24:10	43	57	39	55	47	42	45	43	33	19	15
28/10/2019	02:29:10	46	69	40	54	46	40	40	39	29	15	15
28/10/2019	02:34:10	42	50	41	53	44	40	40	39	31	17	15
28/10/2019	02:39:10	42	51	40	54	46	39	39	38	29	16	15

Our Ref: J002716
Client: Complete Sustainability Solutions Ltd
Project: Edge Lane, Openshaw
Results: Measurement Position 3

Date	Time	Octave Band Centre Frequencies (Hz), dB L _{eq}										
		dB, L _{Aeq}	dB, L _{Amax}	dB, L _{A90}	63	125	250	500	1k	2k	4k	8k
28/10/2019	02:44:10	41	48	39	53	44	39	38	36	26	15	15
28/10/2019	02:49:10	40	44	39	53	45	40	39	38	31	16	15
28/10/2019	02:54:10	42	50	40	54	44	40	40	39	31	16	15
28/10/2019	02:59:10	42	51	40	53	46	43	43	42	36	26	16
28/10/2019	03:04:10	45	54	40	50	42	41	40	39	33	25	16
28/10/2019	03:09:10	43	63	39	49	42	39	39	38	30	20	15
28/10/2019	03:14:10	41	54	39	51	43	42	43	41	36	27	16
28/10/2019	03:19:10	45	64	39	51	42	39	39	38	29	15	15
28/10/2019	03:24:10	41	47	40	50	42	39	39	38	30	16	15
28/10/2019	03:29:10	41	48	39	50	43	39	40	37	28	15	15
28/10/2019	03:34:10	41	47	39	50	42	38	38	37	26	14	15
28/10/2019	03:39:10	40	45	38	50	42	39	39	38	29	15	15
28/10/2019	03:44:10	41	49	40	51	43	40	40	40	32	16	15
28/10/2019	03:49:10	43	59	40	51	42	39	40	38	31	17	15
28/10/2019	03:54:10	42	50	40	51	43	39	40	38	29	16	15
28/10/2019	03:59:10	41	47	39	54	44	41	43	40	33	18	15
28/10/2019	04:04:10	44	50	40	51	43	40	41	37	30	17	15
28/10/2019	04:09:10	41	48	40	52	42	38	38	36	27	15	15
28/10/2019	04:14:10	39	45	38	50	41	38	37	36	28	16	15
28/10/2019	04:19:10	39	48	37	51	49	40	39	37	29	16	15
28/10/2019	04:24:10	41	49	38	52	44	41	40	38	29	19	18
28/10/2019	04:29:10	42	49	39	52	43	39	40	39	30	15	15
28/10/2019	04:34:10	42	50	40	53	43	39	40	38	30	18	15
28/10/2019	04:39:10	41	47	39	53	44	40	40	39	32	18	15
28/10/2019	04:44:10	42	50	39	52	43	39	38	37	29	15	15
28/10/2019	04:49:10	40	47	38	52	45	40	39	38	31	16	15
28/10/2019	04:54:10	42	52	38	52	46	43	42	39	31	17	15
28/10/2019	04:59:10	43	49	39	51	45	42	41	38	31	17	15
28/10/2019	05:04:10	42	50	40	52	46	42	43	38	32	18	15
28/10/2019	05:09:10	43	50	41	52	44	40	40	39	31	18	15
28/10/2019	05:14:10	42	48	40	50	41	39	38	38	29	16	15
28/10/2019	05:19:10	40	49	38	50	41	39	39	38	30	17	15
28/10/2019	05:24:10	41	56	39	52	41	39	38	38	30	16	15
28/10/2019	05:29:10	41	48	39	52	43	40	40	39	31	16	15
28/10/2019	05:34:10	42	47	40	52	43	40	39	39	32	16	15
28/10/2019	05:39:10	42	48	40	51	41	39	39	38	29	16	15
28/10/2019	05:44:10	41	48	39	53	44	41	40	39	32	17	15
28/10/2019	05:49:10	42	52	39	54	45	41	41	42	35	18	15
28/10/2019	05:54:10	45	54	42	54	47	42	45	41	34	18	15
28/10/2019	05:59:10	45	53	43	54	45	43	43	44	38	24	16
28/10/2019	06:04:10	47	58	43	53	44	42	42	43	37	21	15
28/10/2019	06:09:10	46	53	43	54	47	43	44	43	37	23	16
28/10/2019	06:14:10	46	54	44	53	46	44	44	43	37	22	16
28/10/2019	06:19:10	46	55	42	54	44	44	45	46	38	20	15
28/10/2019	06:24:10	48	57	45	53	44	46	47	45	38	19	15
28/10/2019	06:29:10	48	56	45	54	44	44	44	45	38	19	15
28/10/2019	06:34:10	47	52	45	57	49	46	46	45	38	21	15
28/10/2019	06:39:10	48	62	43	55	47	46	44	44	36	19	15
28/10/2019	06:44:10	46	52	44	56	46	45	44	44	38	22	16
28/10/2019	06:49:10	47	55	45	54	45	43	44	44	37	19	15
28/10/2019	06:54:10	47	53	44	54	45	43	43	44	36	21	18
28/10/2019	06:59:10	46	52	44	56	47	45	43	44	39	30	27