



**130 CHARING CROSS ROAD**

**NOISE ASSESSMENT**

**MARCH 2018**

**REPORT REF: 23698/02-18/5777**



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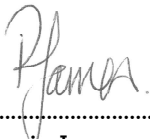
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## 1.0 INTRODUCTION

- 1.1 Mewies Engineering Consultants Ltd (M-EC AcousticAir) has been commissioned by Jacqueline Jackson, 2 Maiden Road, London, E15 4EZ, to prepare a Noise Assessment to support a planning application for the change of operating hours at the premises trading at 130 Charing Cross Road.
- 1.2 Planning permission has recently been obtained for the change of use of the site from Class A1 to Class A5 use. The application initially requested the following opening hours:
- *Thursday – Saturday: 7am until 4:00am*
  - *Sunday: 7am until midnight*
  - *Monday - Wednesday 7am until 01:00am*
- 1.3 The Council, the London Borough of Camden, were not willing to support the above hours on the basis that the submitted noise reports were not adequate to justify such hours, and added condition 5 to the planning permission, which required opening hours to be restricted to 9am - 11pm Monday to Sunday.
- 1.4 The applicant is seeking to vary condition 5 to allow longer opening hours, and this noise assessment seeks to determine what opening hours would be acceptable based upon the ambient noise climate at noise sensitive premises and the levels of noise that would be generated as a direct consequence of the premises being open.

### **Assessment Scope**

- 1.5 Information from the existing noise reports relating to the ambient noise levels and the operation of the existing kitchen extract (KP Acoustics Ltd, 16245.NIA.01.Rev.A 25<sup>th</sup> July 2017 and 16245.PCR.01.Rev.A 25<sup>th</sup> July 2017) has been used to evaluate the impacts associated with the proposed extended hours of operation of the extract and patrons going to and from the premises, to determine whether planning compliance would be maintained during extended hours of operation.
- 1.6 The assessment has regard to the Government's latest planning policy guidance, i.e. British Standard BS4142:2014 'Methods for rating and assessing industrial and commercial sound'. Noise levels have also been evaluated against relevant guidance such as BS8233:2014 'Guidance on sound insulation and noise reduction for buildings' and the World Health Organisation (WHO) guidelines in order to evaluate local impacts on residential amenity.

- 1.7 A site description is provided in Section 2 of this report. Relevant national guidance on environmental noise is presented in Section 3. Section 4 presents the results of the ambient noise surveys, and the noise assessments and recommendations for mitigation are presented in Section 5. Our conclusions are summarised in Section 6.
- 1.8 M-EC has completed this report for the benefit of the individuals referred to in paragraph 1.1 and any relevant statutory authority which may require reference in relation to approvals for the proposed development. Other third parties should not use or rely upon the contents of this report unless explicit written approval has been gained from M-EC.
- 1.9 M-EC accepts no responsibility or liability for:
- a) The consequence of this documentation being used for any purpose or project other than that for which it was commissioned;
  - b) The issue of this document to any third party with whom approval for use has not been agreed.

## 2.0 SITE DESCRIPTION

### Existing Site

- 2.1 The hot food takeaway use is located at 130 Charing Cross Road. Noise sensitive receptors will comprise any residential units located above the ground floor commercial/retail businesses along the front and rear facades of Charing Cross Road, and similarly any within the rear facades of buildings in Denmark Street that overlook the rear of 130 Charing Cross Road. Potential noise impacts will be greatest at those times when background noise levels are lowest, e.g. during early mornings, late evenings and also on Sundays. In addition to noise from mechanical/electrical service plant, the Local Planning Authority's (LPA) Environmental Health Officer (EHO) will also be concerned about the potential noise from patrons at the front of the premises if the premises are open for business into the night-time hours.
- 2.2 A site location plan is included in Appendix A. Charing Cross Road is a busy route through central London with significant road traffic movements, and also significant pedestrian movements along pavements on both sides of the road, that are present much earlier than the Council's proposed start time of 0900 hours. With the substantial redevelopment of Tottenham Court Road Tube station as part of Transport for London's Crossrail project, it is to be expected that the location will become even busier, particularly with regard to pedestrian movements during the early morning and late evening/night-time periods.
- 2.3 Based on the information supplied it is understood that the approved hours of operation for the hot food takeaway use are as shown in Table 2.1, and the desired hours of opening involve a start earlier than 0900, with the closing time being as late as practicable.

**Table 2.1: Hours of Opening**

<b>Situation</b>	<b>Day</b>	<b>Open</b>	<b>Close</b>
Approved	Mon-Sun	0900	2300
Wanted	Mon-Sun	Before 0900	After 2300

- 2.4 The proposed site layout plan for the hot food takeaway use is shown in Appendix B together with building elevations showing that the ducting for the kitchen extract system would terminate at 1m above roof level on the rear facade.

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## 3.0 NOISE CRITERIA

### Noise Terms and Units

- 3.1 Noise levels are measured and assessed using the decibel scale (dB), which provides a measure of the air pressure changes due to vibrating sources such as vehicle engines or machinery. Due to the vast range of air pressures that the human ear is capable of detecting, the decibel measurement uses a logarithmic scale that compresses the data into a more manageable scale for assessment purposes. A detailed explanation of the derivation of the decibel scale is presented in Appendix C.
- 3.2 Due to the logarithmic nature of the dB scale, the addition of two or more noise levels has to be done logarithmically rather than arithmetically. For example, two equal sound sources each producing 50 dB, when operated simultaneously, do not result in a noise level of 100 dB but instead produce a combined level of 53 dB, i.e. a rise of 3 dB for each doubling of sound energy. Subjectively, a 3 dB change does not represent a doubling or halving of loudness; to make a sound appear twice or half as loud requires a change of 10 dB.
- 3.3 The subjective loudness of noise can be measured by applying a filter or weighting that equates to the frequency response of the human ear. This is referred to as an A-weighting and when applied results in noise levels expressed as dB(A). dB(A) noise levels reflect the human perception of loudness.

### National Planning Policy Framework

- 3.4 The National Planning Policy Framework (NPPF), issued by the Department for Communities and Local Government in March 2012, sets out the Government's planning policies for England and how these are to be expected to be applied. The NPPF must be taken into account in the preparation of local and neighbourhood plans, and is to be a material consideration in planning decisions.
- 3.5 With a key emphasis on sustainable development, the NPPF identifies those planning guidance documents that have been revoked and replaced by the Framework, and, in relation to environmental emissions, these include, amongst others, Planning Policy Statement 23: Planning and Pollution Control (2004) and Planning Policy Guidance 24: Planning and Noise (1994).
- 3.6 The NPPF's guidance with respect to noise and emissions is that planning policies and decisions should aim to:

- 
- Avoid noise from giving rise to significant adverse impacts on health and quality of life as a result of new development;
  - Mitigate and reduce to a minimum other adverse impacts on health and quality of life arising from noise from new development, including through the use of conditions;
  - Recognize that development will often create some noise and existing businesses wanting to develop in continuance of their business should not have unreasonable restrictions put on them because of changes in nearby land uses since they were established; and
  - Identify and protect areas of tranquility, which have remained relatively undisturbed by noise and are prized for their recreational and amenity value for this reason.
- 3.7 In drawing up their Local Plans to implement the NPPF, Local Planning Authorities are advised that significant adverse impacts on any of the three key dimensions of sustainable development (economic, social and environmental) should be avoided and, wherever possible, alternative options which reduce or eliminate such impacts should be pursued. Where adverse impacts are unavoidable, measures to mitigate the impact should be considered, and where adequate mitigation measures are not possible, compensatory measures may be appropriate.
- 3.8 An important part of the guidance is that planning authorities are advised to focus on (i) whether the development itself is an acceptable use of the land, and (ii) the impact of the use, rather than the control of processes or emissions themselves where these are subject to approval under pollution control regimes. Local planning authorities should assume that these regimes will operate effectively. Equally, where a planning decision has been made on a particular development, the planning issues should not be revisited through the permitting regimes operated by pollution control authorities. Therefore, the NPPF guidance is that where some noise and/or emissions may be present, there are properly adequate forms of legislation, such as the Control of Pollution Act and the Environmental Protection Act etc., that can be readily employed to deal with such matters.
- Planning Practice Guidance**
- 3.9 In March 2014 the Department for Communities & Local Government updated its on-line planning guidance to assist with interpretation of the NPPF. The guidance covers general
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matters such as relevance of noise issues, noise concerns and factors, how to determine impacts, and mitigation. To assist with recognising when noise could be a concern, the guidance summarises the noise exposure hierarchy as follows, based on the likely average response.

**Table 3.1: Noise Exposure Hierarchy Based on Likely Average Response**

<b>Perception</b>	<b>Examples of Outcomes</b>	<b>Increasing Effect Level</b>	<b>Action</b>
Not noticeable	No Effect	No Observed Effect	No specific measures required
Noticeable 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
<b>Lowest Observed Adverse Effect Level</b>			
Noticeable 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
<b>Significant Observed Adverse Effect Level</b>			
Noticeable 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
Noticeable 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

**BS8233:2014 'Guidance on sound insulation and noise reduction for buildings'**

- 3.10 For steady external noise sources, BS8233:2014 states that it is generally desirable that the internal ambient noise level does not exceed the guideline values in Table 3.2.

**Table 3.2: Indoor ambient noise levels for dwellings**

Activity	Location	Daytime 07:00 to 23:00	Night-time 23:00 to 07:00
Resting	Living room	35 dB $L_{Aeq,16hour}$	-
Dining	Dining room	40 dB $L_{Aeq,16hour}$	-
Sleeping (daytime resting)	Bedroom	35 dB $L_{Aeq,16hour}$	30 dB $L_{Aeq,8hour}$

**NOTE 1** Table 3.2 provides recommended levels for overall noise in the design of a building. These are the sum total of structure-borne and airborne noise sources. Groundborne noise is assessed separately and is not included as part of these targets, as human response to groundborne noise varies with many factors such as level, character, timing, occupant expectation and sensitivity.

**NOTE 2** The levels shown in Table 3.2 are based on the existing guidelines issued by the WHO and assume normal diurnal fluctuations in external noise. In cases where local conditions do not follow a typical diurnal pattern, for example on a road serving a port with high levels of traffic at certain times of the night, an appropriate alternative period, e.g. 1 hour, may be used, but the level should be selected to ensure consistency with the levels recommended in Table 3.2.

**NOTE 3** These levels are based on annual average data and do not have to be achieved in all circumstances. For example, it is normal to exclude occasional events, such as fireworks night or New Years Eve.

**NOTE 4** 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  $L_{Amax,P}$  depending on the character and number of events per night. Sporadic noise events could require separate values.

**NOTE 5** If relying on closed windows to meet the guide values, there needs to be an appropriate alternative ventilation that does not compromise the façade insulation or the resulting noise level.

**NOTE 6** Attention is drawn to the building regulations (30, 31, 32).

**NOTE 7** Where development is considered necessary or desirable, despite external noise levels above WHO guidelines, the internal target levels may be relaxed by up to 5 dB and reasonable internal conditions still achieved.

3.11 For traditional external areas that are used for amenity space, such as gardens and patios, the BS says it is desirable that “the external noise does not exceed 50 dB  $L_{Aeq,T}$ , with an upper guideline value of 55dB  $L_{Aeq,T}$ .”

3.12 However, due to the nationwide difficulty in satisfying an external noise criterion of 55 dB  $L_{Aeq,T}$  in urban areas where transportation noise is prevalent, the BS provides an overarching consideration of how to treat outdoor garden areas in the following way:

... 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.

Other locations, such as balconies, roof gardens and terraces, are also important in residential buildings where normal external amenity space might be limited or not available, i.e. in flats, apartment blocks, etc. In these locations, specification of noise limits is not necessarily appropriate. Small balconies may be included for uses such as drying washing or growing pot plants, and noise limits should not be necessary for these uses.

### World Health Organisation Guidelines

- 3.13 The noise guidance from the World Health Organisation (Community Noise, WHO Vol. 2, Issue 1, 1995, and Guidelines for Community Noise, 2000) is that in order to avoid sleep disturbance the period noise level ( $L_{Aeq}$ ) should not exceed 30 dB internally and individual noise events should not normally exceed 45 dB  $L_{Amax}$ . To preserve speech intelligibility during the daytime and evening, the recommended internal noise level for living rooms is 35 dB  $L_{Aeq,T}$ . These  $L_{Aeq}$  values are consistent with the latest guidance of BS8233.
- 3.14 The WHO noise criteria for dwellings are summarised in Table 3.3 together with the desirable noise levels for outdoor living areas, which are likewise equal to those referenced in BS8233.

**Table 3.3: WHO Guideline Noise Levels for Dwellings**

Location	Critical Health Effect(s)	$L_{Aeq}$ dB	Time base	$L_{Amax}$ fast dB
Outdoor living area	Serious annoyance, daytime and evening	55	16 hours	-
	Moderate annoyance, daytime and evening	50	16 hours	-
Dwelling, indoors	Speech intelligibility & moderate annoyance, daytime & evening	35	16 hours	
Inside bedrooms	Sleep disturbance, night-time	30	8 hours	45
Outside bedrooms	Sleep disturbance, window open (outdoor values)	45	8 hours	60

- 3.15 Section 3.4 of the WHO Guidelines states that for good sleep, indoor noise levels should not exceed approximately 45 dB  $L_{Amax}$  more than 10-15 times/night. On the basis of the WHO's 15 dB façade insulation for windows partly open, this equates to external  $L_{Amax}$  of 60 dB that should not be exceeded more than 10-15 times/night.

- 3.16 As for the comments in BS8233 relating to the ability to achieve the outdoor noise criterion in many locations, in considering the application of an outdoor criterion of 55 dB  $L_{Aeq}$  or less, it is again important to take account of the feasibility of achieving such a level. A review of 'Health effect-based noise assessment methods: A review and feasibility study' (NPL Report CMAM 16, 1998) reported the following:

*"Perhaps the main weaknesses of both WHO-inspired documents is that they fail to consider the practicality of actually being able to achieve any of the stated guideline values. .... We know from the most recent national survey of noise exposure carried out in England and Wales (Sargent 93) that around 56% of the population are exposed to daytime noise levels exceeding 55  $L_{Aeq}$  and that around 65% are exposed to night-time noise levels exceeding 45  $L_{Aeq}$  (as measured outside the house in each case). .... The percentages exposed above the WHO guideline values could not be significantly reduced without drastic action to virtually eliminate road traffic noise and other forms of transportation noise (including public transport) from the vicinity of houses. The social and economic consequences of such action would be likely to be far greater than any environmental advantages of reducing the proportion of the population annoyed by noise. In addition, there is no evidence that anything other than a small minority of the population exposed at such noise levels find them to be particularly onerous in the context of their daily lives."*

- 3.17 The latest WHO guidelines (Night Noise Guidelines for Europe, 2009) are applicable to Member States of the European Region and represent an extension to, as well as an update of, the previous WHO Guidelines for Community Noise. Based on the scientific evidence on thresholds of night noise exposure indicated by  $L_{night, outside}$  as defined in the Environmental Noise Directive (2002/49/EC), the latest WHO guidance recommends an  $L_{night, outside}$  of 40 dB as a target for the night noise guideline (NNG) to protect the public, including the most vulnerable groups such as children, the chronically ill and the elderly. An  $L_{night, outside}$  value of 55 dB is recommended as an interim target for countries where the NNG cannot be achieved in the short term for various reasons, and where policy-makers choose to adopt a stepwise approach.
- 3.18 The  $L_{night, outside}$  is the A-weighted long-term average sound level determined over all nights of the year, where the night is the 8-hour period between 2300-0700 hours. The target noise level excludes sound reflected from a building façade, therefore, a 3 dB façade correction must also be allowed in the case of measurements or predictions at building facades. The receptor height is typically 3.8 to 4.2m above ground level, i.e. as applicable first floor bedrooms, but in the case of rural areas with single storey dwellings a height of not less than 1.5m is applicable.

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**Commercial Noise**

- 3.19 With respect to noise from industrial and commercial developments, British Standard 4142:2014 'Methods for rating and assessing industrial and commercial sound' provides a system for rating noise from industrial development and assessing the likely impact by comparing this to the background noise level at sensitive receiver locations. Tonal or impulsive characteristics of the noise are likely to increase the impact and this is accounted for in the rating procedure through the addition of an appropriate correction factor.
- 3.20 The character corrections are flexible according to whether the acoustic character is just perceptible at the noise receptor, or is clearly perceptible or highly perceptible, and range from 0 to 6 dB for tonal noise, 3 to 9 dB for impulsive noise, and 3 dB for other non-tonal/impulsive acoustic characteristics.
- 3.21 The assessment is based on the difference between the noise from the industrial process (expressed in terms of the  $L_{Aeq}$  rating level including any acoustic character correction) and the existing  $L_{A90}$  background noise level that would otherwise prevail in the absence of the noise source. For daytime operations (0700-2300 hours) the BS4142 assessment is undertaken over a 1-hour time period, and for night-time (2300-0700 hours) the assessment is undertaken over a 15-minute period. However, when making the comparison against the background noise level, the Standard points out that the objective is not simply to ascertain a lowest measured background noise level, but rather to quantify what is typical during particular time periods. Diurnal patterns can have a major influence on background sound levels and, for example, the middle of the night can be distinctly different (and potentially of lesser importance) compared to the start or end of the night-time period for sleep purposes.
- 3.22 BS4142 defines the significance of the difference between the rating level and the background noise level as follows:
- a) Typically, the greater this difference, the greater the magnitude of the impact.
  - b) A difference of around +10 dB or more is likely to be an indication of a significant adverse impact, depending on the context.
  - c) A difference of around +5 dB is likely to be an indication of an adverse impact, depending on the context.
  - d) The lower the rating level is relative to the measured background sound level, the less likely it is that the specific sound source will have an adverse impact or a

significant adverse impact. Where the rating level does not exceed the background sound level, this is an indication of the specific sound source having a low impact, depending on the context.

- 3.23 The Standard advises that adverse impacts include, but are not limited to, annoyance and sleep disturbance. Not all adverse impacts will lead to complaints and not every complaint is proof of an adverse impact.
- 3.24 The Standard also emphasises the need for matters to be placed into context, and in this respect it mentions several matters for consideration, which include whether dwellings or other premises used for residential purposes will already incorporate design measures that secure good internal and/or outdoor acoustic conditions, such as:
- i) facade insulation treatment;
  - ii) ventilation and/or cooling that will reduce the need to have windows open so as to provide rapid or purge ventilation; and
  - iii) acoustic screening.

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## 4.0 NOISE SURVEYS

- 4.1 Comprehensive noise surveys for the site were undertaken by KP Acoustics Ltd during 23<sup>rd</sup> to 26<sup>th</sup> June 2017 (Report Ref: 16245.NIA.01.Rev.A), and 6<sup>th</sup> to 10<sup>th</sup> July 2017 (Report Ref: 16245.PCR.01.Rev.A).
- 4.2 Continuous automated monitoring was undertaken for the duration of both surveys, and both surveys spanned a complete weekend period thereby recording normal weekday and weekend periods as well as those periods when background noise levels are typically expected to be lowest, i.e. late evenings/night-times/early mornings and most particularly those during a Sunday night/Monday morning.
- 4.3 Location 1 was on the building's front facade at first floor level and monitored between 12:10pm on Friday 23<sup>rd</sup> to 12:10pm on Monday 26<sup>th</sup> June 2017. The monitoring position was based both on accessibility and on collecting representative noise data in relation to the nearest noise sensitive receivers in Charing Cross Road. Location 2 was on the building's rear facade at first floor level and monitored between 15:58pm on Thursday 6<sup>th</sup> to 13:23pm on Monday 10<sup>th</sup> July 2017. The monitoring position was chosen in order to collect representative noise data in relation to the nearest noise sensitive receiver relative to the proposed plant installation, i.e. the kitchen extract.
- 4.4 Weather conditions during both surveys were generally dry with wind speeds within acceptable tolerances and, therefore, suitable for the measurement of environmental noise.
- 4.5 The equipment calibration was verified before and after use and no abnormalities were observed.
- 4.6 The equipment used was as follows:
- SVANTEK 957 Class 1 Sound Level Meter; and  
B&K Type 4231 Class 1 Calibrator.
- 4.7 All KP Acoustics' noise measurements are presented in Appendix D and summarised in Tables 4.1 for the front facade and Table 4.2 for the rear facade.

**Table 4.1: Noise Measurements at Front Facade, Free-field dB(A)**

Day	Period	Unit	L <sub>Aeq</sub>	L <sub>Amax</sub>	L <sub>A10</sub>	L <sub>A90</sub>
Friday	Day	Minimum	69	78.8	71.8	61.3
		Maximum	82.2	106.1	79.9	69.8
		Average	73.2	86.8	74.7	64
	Evening	Minimum	69.1	79.1	71.7	62.8
		Maximum	84.3	112.1	79.8	68.9
		Average	73.7	88.3	74.4	65.7
	Night	Minimum	62.8	73.9	67.5	51
		Maximum	81.1	102.4	84.2	71.3
		Average	73.4	86.4	74.1	62.5
Saturday	Day	Minimum	65.9	75.5	69.5	52.5
		Maximum	82.6	109.2	77	64.7
		Average	70.1	84.6	72.4	60.5
	Evening	Minimum	66.7	76.5	70.3	59.4
		Maximum	76.9	104.5	78.1	64.3
		Average	71.2	86	72.4	62.1
	Night	Minimum	62.6	74.6	67.1	51.4
		Maximum	77.8	99.4	81.2	70.2
		Average	72.2	85.6	73.6	62.3
Sunday	Day	Minimum	62.5	74.3	67.3	52.2
		Maximum	82.5	107.1	74.5	63.1
		Average	70.7	83.5	71.1	58.2
	Evening	Minimum	64.6	74.8	68.5	55.5
		Maximum	84.2	108.9	79.3	62.3
		Average	72.5	84.9	71.8	58.9
	Night	Minimum	60.8	72.5	66	49.3
		Maximum	81	107	75.9	66.8
		Average	70.3	84.3	71.3	58.8
Monday	Day	Minimum	66.5	77	69.9	56.6
		Maximum	80.8	99.3	80.5	65.3
		Average	71.3	84.5	73.3	60.5



**Table 4.2: Noise Measurements at Rear Facade, Free-field dB(A)**

Day	Period	Unit	L <sub>Aeq</sub>	L <sub>Amax</sub>	L <sub>A10</sub>	L <sub>A90</sub>
Thursday	Day	Minimum	49.1	58.3	50.6	46.3
		Maximum	78.4	83.7	82.6	62
		Average	65.1	69.1	62.6	58.3
	Evening	Minimum	46.7	57.2	47.8	44.4
		Maximum	65.7	88.9	63.5	61.6
		Average	61.4	67	61.5	57
	Night	Minimum	43.2	49.5	44.8	39.6
		Maximum	62.5	78.2	63.7	61.5
		Average	60.3	65	61.1	47.6
Friday	Day	Minimum	50	59.1	51.4	43.2
		Maximum	64	85.9	65.1	61.4
		Average	60.5	69.3	62.3	50.6
	Evening	Minimum	48.2	56.2	50.2	44.7
		Maximum	62.6	79.7	63.6	61.6
		Average	60.7	67.1	61.7	52.7
	Night	Minimum	43.7	53.9	45.8	39.1
		Maximum	62.8	82.4	63.9	61.7
		Average	60.5	67.3	61.7	49.6
Saturday	Day	Minimum	51.1	62.8	52.8	40.5
		Maximum	64.6	85.6	67	61.6
		Average	60.7	68.4	62.7	50.9
	Evening	Minimum	52.6	60.2	54.1	49.5
		Maximum	63.7	87.1	64.4	61.7
		Average	62	69.6	62.6	59.5
	Night	Minimum	46.8	56.4	47.9	39.4
		Maximum	64.1	87.5	64.6	61.6
		Average	61	68.1	61.9	52.1
Sunday	Day	Minimum	41.8	49.7	43.1	40
		Maximum	62.4	81.6	63.8	61.4
		Average	59.5	65.3	61.3	45.1
	Evening	Minimum	45.4	56.9	46.9	41.4
		Maximum	62.2	72.3	63.2	61.2
		Average	60.4	65.3	60.9	52.5
	Night	Minimum	41.9	46.5	43.1	38.3
		Maximum	62.5	78.5	63.9	61.4
		Average	60.1	64.8	61.2	43.7
Monday	Day	Minimum	50.3	58	52	42.3
		Maximum	76.6	103.2	76	71.1
		Average	64	71.7	63.5	52.8

4.8 A comparison of the average day, evening and night-time L<sub>Aeq</sub> and L<sub>Amax</sub> measured on the front facade is presented in Table 4.3. The average L<sub>Aeq</sub> ranged from 70-74 dB, and

average  $L_{Amax}$  from 84-88 dB, and there was no significant difference between the noise climates during the day, evening and night-time. In fact, average noise levels were generally very marginally lower during the day. Therefore, operational activity at the hot food takeaway use that is acceptable during the day should equally be acceptable during anytime of the evening or night since operational noise levels will not increase and ambient noise levels do not decrease.

**Table 4.3: Comparison of the Front Facade Average  $L_{Aeq}/L_{Amax}$**

<b>Day of Week</b>	<b>Day</b>	<b>Evening</b>	<b>Night</b>
Friday	73/87	74/88	73/86
Saturday	70/85	71/86	72/86
Sunday	71/84	73/85	70/84
Monday	71/85	-	-

4.9 A comparison of the average day, evening and night-time  $L_{A90}$  measured on the front facade is presented in Table 4.4. The average  $L_{A90}$  ranged from 58-66 dB, with the lowest values of 58-59 dB recorded during the Sunday. However, the results again show no reduction in background noise levels on the front facade from the day to the evening to the night-time periods. Once again, average evening and night-time background noise levels remain similar to those during the day.

**Table 4.4: Comparison of the Front Facade Average  $L_{A90}$**

<b>Day of Week</b>	<b>Day</b>	<b>Evening</b>	<b>Night</b>
Friday	64	66	63
Saturday	61	62	62
Sunday	58	59	59
Monday	61	-	-

4.10 A similar comparison for the measurements on the rear facade is shown in Tables 4.5 and 4.6. The average  $L_{Aeq}$  were 10 dB lower than those measured on the front facade and ranged from 60-65 dB, whereas the average  $L_{Amax}$  ranged from 65-72 dB and were 15-20 dB lower. Once again there was no significant difference between the noise climates during the day, evening and night-time, although noise levels during the Sunday were very marginally lower.

**Table 4.5: Comparison of the Rear Facade Average  $L_{Aeq}/L_{Amax}$** 

Day of Week	Day	Evening	Night
Thursday	65/69	61/67	60/65
Friday	61/69	61/67	61/67
Saturday	61/68	62/70	61/68
Sunday	60/65	60/65	60/65
Monday	64/72	-	-

- 4.11 The average day, evening and night-time  $L_{A90}$  measured on the rear facade are presented in Table 4.6. The average  $L_{A90}$  ranged from 44-60 dB and were 6-14 dB lower than those on the front facade, with the lowest values of 44-53 dB recorded during the Sunday. The evening background noise levels were similar to and sometimes higher than those during the day, and, apart from the measurements during Thursday, the average night-time background noise levels were again not significantly different to those recorded during the day. The slightly greater variation seen to measurements within each day, evening and night-time period will be due to other items of mechanical/electrical service plant that operate from time to time on the rear facades of other local buildings, which is considered further below in a statistical analysis of background noise levels.

**Table 4.6: Comparison of the Rear Facade Average  $L_{A90}$** 

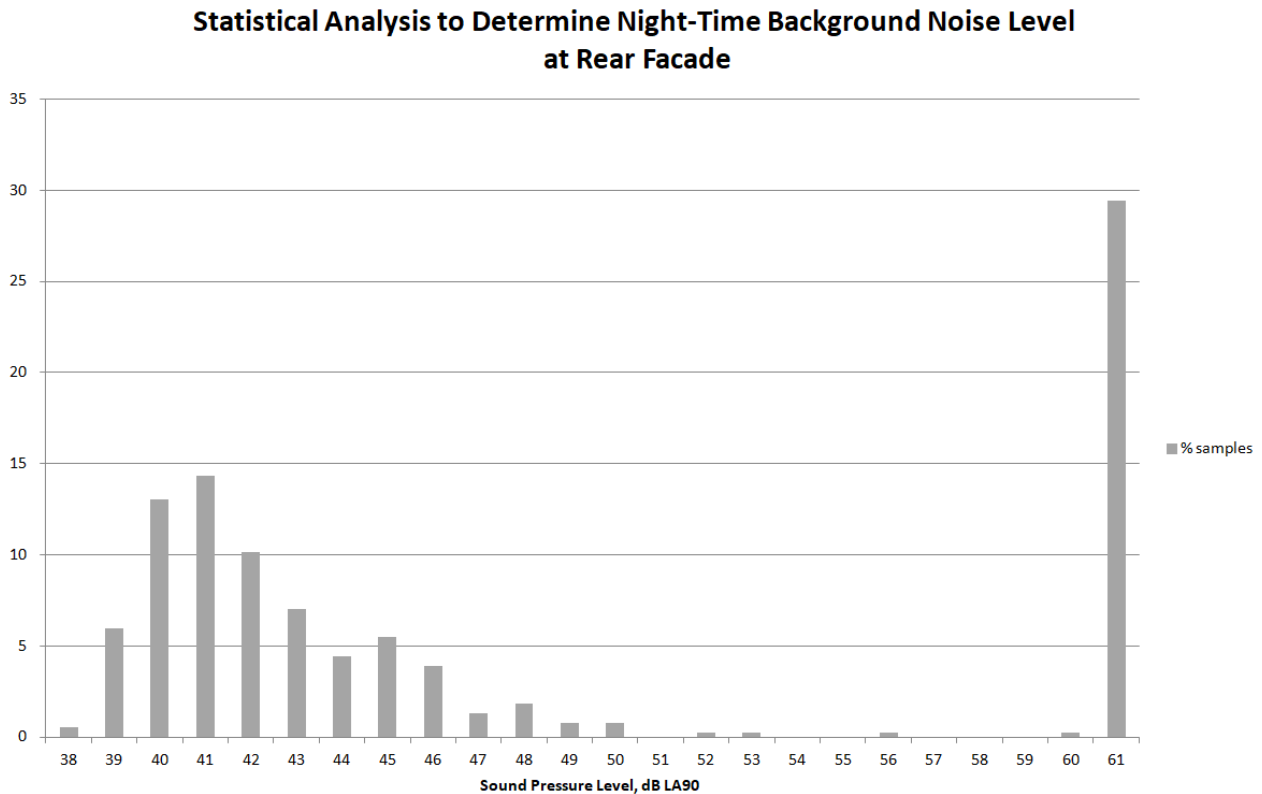
Day of Week	Day	Evening	Night
Thursday	58	57	48
Friday	51	53	50
Saturday	51	60	52
Sunday	45	53	44
Monday	53	-	-

- 4.12 The  $L_{A90}$  background noise level that otherwise prevails in the absence of noise from the premise's kitchen extract system is a key component of a BS4142 assessment. With regard to derivation of the  $L_{A90}$  for assessment purposes, Section 8 of BS4142 makes it clear that the objective of the assessment *"is not simply to ascertain a lowest measured background sound level, but rather to quantify what is typical during particular time periods."*
- 4.13 Therefore, for noise control purposes it is inappropriate to base noise controls on the very lowest (single minimum) value since this would be overly restrictive and unreasonable.
- 4.14 Paragraph 8.14 of BS4142 similarly remarks that *"The monitoring duration should reflect the range of background sound levels for the period being assessed. In practice, there*

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*is no 'single' background sound level as this is a fluctuating parameter. However, the background sound level used for the assessment should be representative of the period being assessed."*

- 4.15 The subsequent Note 1 states that *"A representative level ought to account for the range of background sound levels and ought not automatically to be assumed to be either the minimum or modal value"*.
- 4.16 Note 4 also provides an example of a statistical analysis of the results of all the measurement periods in order to determine a background sound level. However, for the distribution of data used, there is no fixed procedure for determining a single background sound level for assessment purposes and the value adopted by BS4142 in its example was only *"considered to be representative and in this instance was also the most commonly occurring value"*.
- 4.17 A statistical analysis of the night-time  $L_{A90}$  values, consistent with the BS4142 advice, is shown in Figure 4.1. This is based on the night-time noise measurements on the rear facade and takes account of existing noise contributions from other mechanical/electrical service plant operating in the area. The most commonly occurring  $L_{A90}$  during the night-time was a value of 61 dB, which was noticeably different to all other values and equates to periods of the night when an item of mechanical/electrical service plant was operating within the confines of the rear facades of neighbouring buildings. In fact, the source tended to operate most from 2300 hours onwards for 1-2 hours, with some other sporadic on-times during the night.
- 4.18 Excluding the noise from the above item of existing plant, the most frequent value for the night-time  $L_{A90}$  was 41 dB (14% of the samples). On this basis, it is considered that a night-time value of 41 dB  $L_{A90}$  should be used for assessment and noise control purposes. Compliance with this value at other times of the day or evening will equally be acceptable.

**Figure 4.1: Statistical Analysis of Night-Time Measured Background Noise Levels**

- 4.19 The peak noise events noted in Appendix D and the noise tables above show how existing dwellings fronting Charing Cross Road are subject to regular noises from local activities such as motor vehicle movements and also people talking on the pavement at all times throughout the day, evening and night-time periods, generating  $L_{Amax}$  noise levels up to 112 dB subject to their proximity to the monitoring location/receptor.
- 4.20 The average  $L_{A10}$ , representative of traffic noise levels, also shows no significant decrease over the evening period from 1900-2300 hours, or indeed during the night-time, which again is indicative of no significant reduction in vehicle movements along Charing Cross Road over the evening and night-time periods.
- 4.21 Therefore, all of the noise measurements demonstrate a fairly constant ambient noise level continuing into and throughout the evening and night-time periods.

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## 5.0 NOISE IMPACT ASSESSMENT

### Front Facade

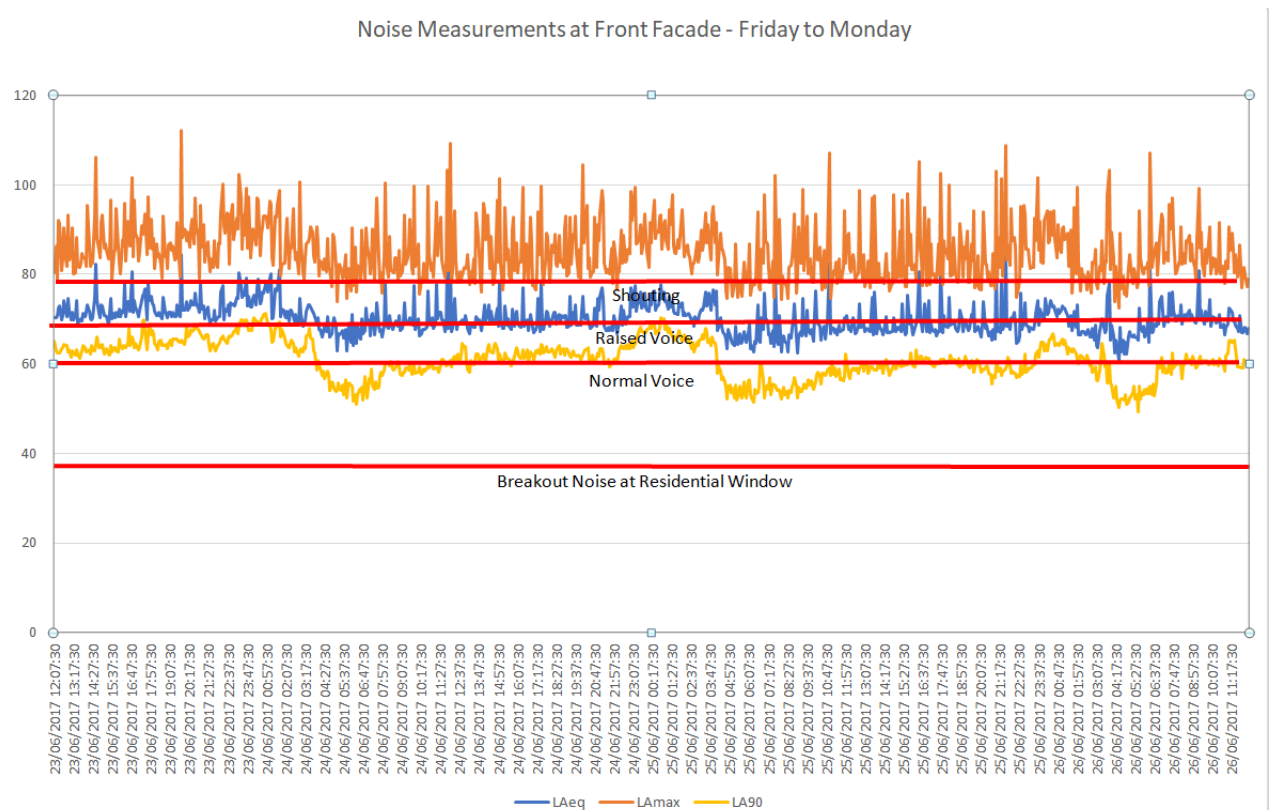
- 5.1 The noise survey data demonstrates that the external facade noise levels remain constant throughout the day and also throughout the days of the week, with an average day and night  $L_{Aeq}$  of around 72 dB on the front facade and 60 dB on the rear facade, and average  $L_{Amax}$  up to 86 dB on the front and 68 dB on the rear.
- 5.2 Noise generated within the proposed ground floor class A5 use (hot food takeaways) would not include amplified music playback, or live music. Therefore, the only noise sources would be equipment noise and people inside the premises, and people travelling to and from the premises at the building frontage. The likelihood of noise from vehicles stopping and idling outside the premises is unlikely due to the presence of the pedestrian traffic lights and the local parking restrictions and bus lanes.
- 5.3 The Council's noise requirement (Camden Local Plan Adoption Version 2017, Appendix 3: Noise Thresholds) is that noise generated by the business should be 10dB below the background noise in the area at 1m from a noise sensitive receiver's façade, which is defined as a Lowest Observed Adverse Effect Level (LOAEL).
- 5.4 The original noise report (KP Acoustics Ltd, 16245.NIA.01.Rev.A 25<sup>th</sup> July 2017) provides the noise breakout assessments and shows that the operational noise level at 1m from the closest noise sensitive receiver's façade (using an internal noise level of 75 dB  $L_{Aeq}$ , which is considered to reflect an extreme worst case scenario) would be 38 dB  $L_{Aeq}$ .
- 5.5 The average background noise levels measured at the front facade ranged from 58-66 dB over the various 24-hour periods monitored. Therefore, noise breakout from the hot food takeaway use would lie 20 dB or more below the typical background noise level and have no impact upon the noise levels outside residential premises at any time of the day or night.
- 5.6 As mentioned in Section 4 in relation to the selection of a background noise level, BS4142 would not routinely use the minimum value for noise assessment or noise control purposes. Nevertheless, the lowest  $L_{A90}$  background noise level recorded on the front facade has been identified as being a value of 49.3 dB, which occurred at 0537 hours on Monday 26<sup>th</sup> June (i.e. during the Sunday night, which is often considered to be the quietest period of the week).

- 5.7 Therefore, even if one utilises the minimum background noise level (48 dB) as a control limit, the operational noise (38 dB) would continue to lie 10 dB below this and fully comply with the Council's requirement. The operational breakout noise is represented in Figure 5.1 by the lower horizontal red line and is seen to lie below all other noise parameters at all times. Consequently, whatever times the premises trade during the day, evening or night there would be no impact upon the noise levels outside local dwellings, and likewise no impact upon internal noise due to external noise passing through open or closed windows since the noise will always remain substantially lower than all other ambient noises, which typically lie at 72 dB  $L_{Aeq}$  during both the day and the night.
- 5.8 The original noise report (KP Acoustics Ltd, 16245.NIA.01.Rev.A 25<sup>th</sup> July 2017) also provides evidence on noise transmission through the building based upon the present material construction of the party floor, and results in an internal noise level directly above the premises of 28 dB  $L_{Aeq}$ . This lies below the BS8223 and WHO criterion of 30 dB  $L_{Aeq}$  for bedrooms, aimed at preventing sleep disturbance effects.
- 5.9 Based upon an external noise level of 72 dB  $L_{Aeq}$  due to ambient noise sources such as local traffic, and assuming a basic sound reduction of say 33 dB(A) for closed thermal double glazed windows as per the old planning policy guidance PPG24, internal noise levels will typically be 39 dB, i.e. 11 dB higher than any internally generated noise. With open windows, the internal ambient noise will be even higher. Therefore, once again the noise data demonstrates that the operations within the premises would not affect internal noise levels within the nearest residential unit at any time of the day, evening or night.
- 5.10 With regard to the potential effects of patrons using the hot food takeaway use, this could only materialise from the absolute noise levels arising from people outside the premises. It is unlikely the patrons would routinely drive to the premises and be able to park outside, therefore, additional vehicle noise should not be an issue, although in any event a single vehicle would generate no more noise and no different type of noise to all those presently passing the premises.
- 5.11 Normal speech typically generates noise levels of around 60 dB(A) at a distance of 1m, whereas raised voices or shouting can generate levels between 66-78 dB(A). Noise measurements at dwellings fronting directly onto pavement areas along relatively narrow streets containing retail outlets tend to show noise levels from people talking as they walk along the pavements at below 60 dB(A) outside the windows of dwellings.

People leaving, for example, a public house will often generate higher noise levels of more than 70 dB(A) as people talk using raised voices or call to each other.

- 5.12 The typical noise level generated by normal voices, raised voices, and shouting are displayed on Figure 5.1, against the fluctuating ambient noise levels, by the three upper red lines. In many cases, noise levels due to such sources would tend to be lower outside dwellings fronting Charing Cross Road due to increasing separation distances. Therefore, the pictorial comparative presented in Figure 5.1 represents a worst case effect. It also needs to be recognised that due to the nature of the area and the existing businesses and activities along Charing Cross Road, noise events such as normal speech, raised voices and shouting will already be present in the area from time to time. Should patrons generate noise outside the premises their noise levels would be no different to those similar events already present.

**Figure 5.1: Ambient Noise Levels on Front Facade and Potential Noise from Proposed Use**



- 5.13 Normal voices would be similar to existing background noise levels. Raised voices would be similar to the ambient  $L_{Aeq}$  noise levels but at all times lower than the fluctuating maximum noise levels due to existing ambient noises. Shouting would generate a level of noise at the lower end of the existing range of  $L_{Amax}$  noise levels. Any events such as these



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would not be continuous but would only represent an instantaneous noise of brief duration. None of them would significantly affect the existing noise climate of the area and would not have an effect on existing residential amenity.

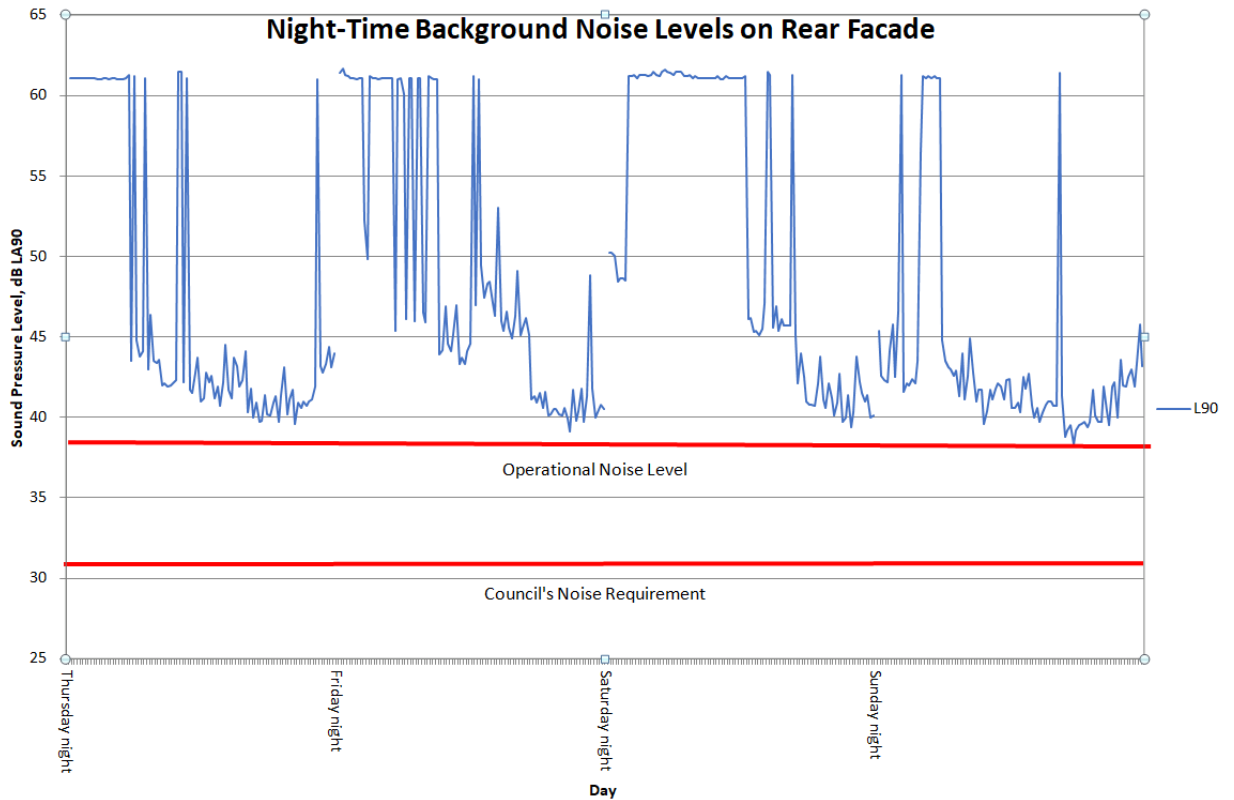
- 5.14 The noise evidence shows that there would be no harmful impact resulting from the proposed use prior of the premises before 0900 hours in the morning and beyond 2300 hours at night. The area is clearly busy during all times of the day, evening and night and also during each day of the week including weekends, and as a consequence there is no need for a specific restriction relating to the hours of opening.
- 5.15 Therefore, the ambient noise climate during the proposed extended hours of operation indicates that the hot food takeaway use at 130 Charing Cross Road can trade during these times without its customers causing harm to local residents by adversely affecting the existing noise climate.

### **Rear Facade**

- 5.16 The original noise report relating to the operation of the kitchen extract and planning compliance (KP Acoustics Ltd, 16245.PCR.01.Rev.A 25<sup>th</sup> July 2017) provides the manufacturer's source noise data for the extract fan and shows that the operational noise level at 1m from the closest noise sensitive receiver's façade, with the proposed acoustic silencer and acoustic panels to external ducting and anti-vibration mounts, would be 38 dB  $L_{Aeq}$ . With the proposed acoustic treatment to the extract system no tonal or impulsive characteristics would be present.
- 5.17 The average background noise levels measured at the rear facade ranged from 44-60 dB over the various 24-hour periods monitored, and the lowest value of all was 38.3 dB  $L_{A90}$  at 0453 hours during Sunday night/Monday morning. The night-time background noise levels on the rear facade are presented in Figure 5.2 and superimposed on this are the calculated operational noise level at the nearest residential facade (38 dB, upper red line) and what would be a noise limit based on being 10 dB below typical background (41-10=31 dB, lower red line).
- 5.18 The operational noise level would at all times lie below the ambient background noise levels during the night-time, which represents the most sensitive period to protect against sleep disturbance. Even if an operational noise of 38 dB were to be added to the lowest measured value (38 dB) the end result would be a background noise level of only 41 dB, i.e. a rise of 3 dB but only during the briefest periods of the night when the background noise level is at its lowest. The combined effect would also be the same as the most frequent night-time background noise level of 41 dB, and therefore reflect no

change. This worst case effect would not significantly alter the ambient noise climate during the night, and the combined effect would still be 19 dB below the ambient  $L_{Aeq}$  of 60 dB present at that time.

**Figure 5.2: Night-Time Background Noise Levels on Rear Facade**



- 5.19 BS4142 makes it clear that “Where the rating level does not exceed the background sound level, this is an indication of the specific sound source having a low impact, depending on the context”. Therefore, at all times of the day, evening and night, the operation of the kitchen extract would have a low impact upon existing dwellings.
- 5.20 As previously mentioned, BS4142 never intended that noise assessments and noise control should be based upon the lowest measured background noise level. Instead, a typical or representative value would be more appropriate. At this site, the most frequent night-time background noise level was a value of 41 dB, as demonstrated in Figure 4.1. As documented in paragraph 5.19, the operational noise from the kitchen extract would maintain compliance with and prevent any change to this typical/representative value.
- 5.21 The Council’s stated requirement for plant noise to be 10 dB below the  $L_{A90}$  background noise level, as demonstrated by the lower red line in Figure 5.1, would be overly restrictive and would not achieve any greater protection for the existing background noise levels at the rear facades of dwellings, especially since there are clear instances

when existing plant already causes substantial changes to the ambient noise levels with regular periods, mostly from 2300 hours onwards, when noise levels reach and are maintained at 61 dB.

5.22 As for the situation at the front facade, the noise evidence shows that there would be no harmful impact resulting from the proposed use of the premises before 0900 hours in the morning and beyond 2300 hours at night. As a consequence there is no need for a specific restriction relating to the hours of opening.

5.23 In conclusion, since neither noise from patrons using the food outlet nor noise breakout from inside the premises nor noise from the kitchen extract would have an adverse impact upon the area's noise climate or upon residential amenity and compliance with acceptable noise standards for residential uses, and would not cause adverse impacts under BS4142, there are no noise grounds for refusing the application to extend the operating hours.

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## 6.0 CONCLUSIONS

- 6.1 The long-term monitoring data shows that there is no significant difference between the noise climates during the day, evening and night-time. Therefore, operational activity at the hot food takeaway use that is acceptable during the day would equally be acceptable during anytime of the evening or night since operational noise levels will not increase and ambient noise levels do not decrease.
- 6.2 The average  $L_{Aeq}$  noise level on the front facade is 72 dB during both the day and the night, and values on the rear facade were approximately 10 dB lower and ranged from 60-65 dB. Once again there was no significant difference between the noise climates during the day, evening and night-time on the rear facade, although noise levels during the Sunday were very marginally lower.
- 6.3 All of the noise measurements demonstrate a fairly constant ambient noise level continuing into and throughout the evening and night-time periods.
- 6.4 Noise breakout from the premises would lie 20 dB or more below the typical background noise level and have no impact upon the noise levels outside residential premises at any time of the day or night.
- 6.5 Whatever times the premises trade during the day, evening or night there would be no impact upon the noise levels outside local dwellings, and likewise no impact upon internal noise due to external noise passing through open or closed windows since the operational noise will always remain substantially lower than all other ambient noises.
- 6.6 The calculated noise transmission through the building based upon the present material construction of the party floor results in an internal noise level directly above the premises of 28 dB  $L_{Aeq}$ . This lies below the BS8223 and WHO criterion of 30 dB  $L_{Aeq}$  for bedrooms, aimed at preventing sleep disturbance effects, and also lies at least 11 dB below the internal noise due to external ambient noises. Therefore, once again the noise data demonstrates that the operations within the hot food takeaway use would not affect internal noise levels within the nearest residential unit at any time of the day, evening or night.
- 6.7 Noise from patrons outside the premises would be no different to and no higher than those existing noises caused by people currently outside the premises and walking along Charing Cross Road. Such events would not be continuous but would only represent an

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instantaneous noise of brief duration. None of them would significantly affect the existing noise climate of the area and would not have an effect on existing residential amenity. With the substantial redevelopment of Tottenham Court Road Tube station as part of Transport for London's Crossrail project, it is to be expected that the location will become even busier, particularly with regard to pedestrian movements during the early morning and late evening/night-time periods.

- 6.8 On the rear facade, the operational noise level at 1m from the closest noise sensitive receiver's façade, with the proposed acoustic silencer and acoustic panels to external ducting and anti-vibration mounts, is calculated to be 38 dB  $L_{Aeq}$ . With the proposed acoustic treatment to the extract system no tonal or impulsive characteristics would be present.
- 6.9 The operational noise level on the rear facade would at all times lay below the ambient background noise levels during the night-time, which represents the most sensitive period to protect against sleep disturbance. Even if an operational noise of 38 dB were to be added to the lowest measured value (38 dB) the end result would be a background noise level of only 41 dB, i.e. a rise of 3 dB but only during the briefest periods of the night when the background noise level is at its lowest. The combined effect would remain the same as the most frequent night-time background noise level of 41 dB, and therefore reflect no change. This worst case effect would not significantly alter the ambient noise climate during the night, and the combined effect would still be 19 dB below the ambient  $L_{Aeq}$  of 60 dB present at that time.
- 6.10 BS4142 makes it clear that *"Where the rating level does not exceed the background sound level, this is an indication of the specific sound source having a low impact, depending on the context"*. Therefore, at all times of the day, evening and night, the operation of the kitchen extract would have a low impact upon existing dwellings.
- 6.11 BS4142 states that noise assessments and noise control should not be based upon the lowest measured background noise level. Instead, a typical or representative value is considered appropriate. At this site, the most frequent night-time background noise level was a value of 41 dB. The operational noise from the kitchen extract would maintain compliance with and prevent any change to this typical/representative value.
- 6.12 The Council's requirement for plant noise to be 10 dB below the  $L_{A90}$  background noise level (Camden Local Plan Adoption Version 2017, Appendix 3: Noise Thresholds) would be overly restrictive and would not achieve any greater protection for the existing background noise levels at the rear facades of dwellings, especially since there are clear

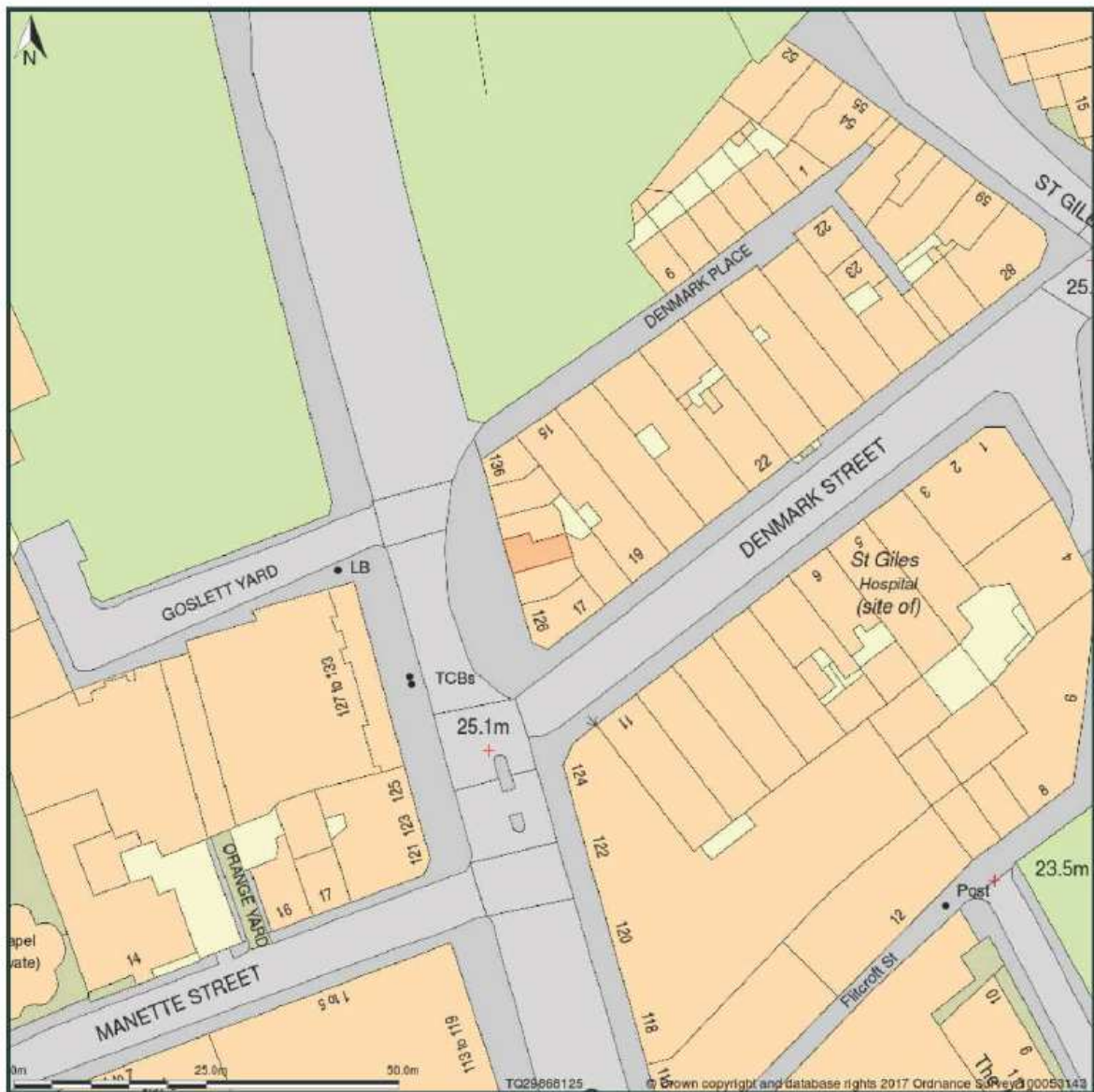
instances when existing plant already cause substantial changes to the ambient noise levels with regular periods, mostly from 2300 hours onwards, when noise levels reach and are maintained at 61 dB.

- 6.13 For both the front and rear facades, the noise evidence shows that there would be no harmful impact resulting from the proposed use of the premises before 0900 hours in the morning and beyond 2300 hours at night. As a consequence there is no need for a specific restriction relating to the hours of opening.
- 6.14 In conclusion, since neither noise from patrons using the food outlet nor noise breakout from inside the premises nor noise from the kitchen extract would have an adverse impact upon the area's noise climate or upon residential amenity and compliance with acceptable noise standards for residential uses, and would not cause adverse impacts under BS4142, there are no noise grounds for refusing the application to extend the operating hours.

**APPENDIX A**

# SITE LOCATION PLAN

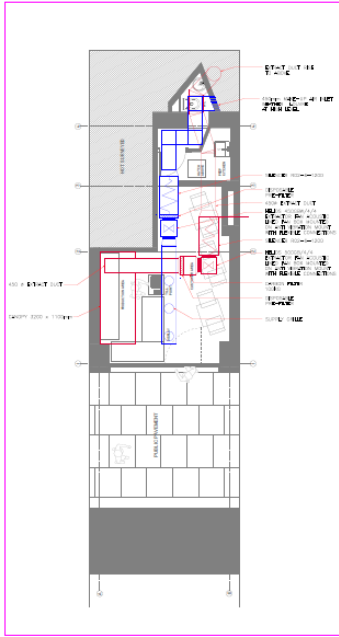
130 Charing Cross Road London WC2H 0LA





**APPENDIX B**

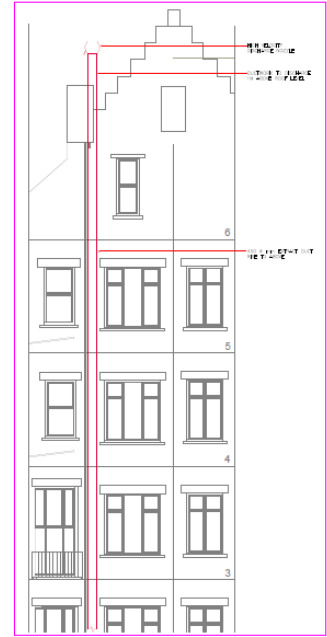
# ILLUSTRATIVE SITE LAYOUT PLAN



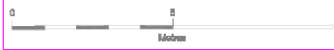
GROUND FLOOR PLAN



PROPOSED REAR ELEVATION



PROPOSED REAR ELEVATION



<p>Notes:</p>	<p>1. Do not scale from this drawing. Use provided dimensions only. All dimensions are in millimeters unless otherwise stated.</p>	<p>Project: 132 CHANNING CROSS ROAD LONDON WC2H 0LA</p> <p>Drawing: <b>KITCHEN VENTILATION SYSTEM</b></p>	<p>Client: FAN RESCUE LTD 132 CHANNING CROSS ROAD LONDON WC2H 0LA Email: info@fanrescue.co.uk</p>	<p>Scale: 1:50 Date: 28.07.2017 Drawing No: FR-CC-M001 Rev: P3</p>
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## **APPENDIX C**

## DESCRIPTION OF NOISE UNITS

- The sounds that we hear are a result of successive air pressure changes. These air pressure changes are generated by vibrating sources, such as motor vehicle engines, and they travel to a receiver, i.e. the human ear, as air pressure waves.
- The human ear is capable of detecting a vast range of air pressures, from the lowest sound intensity that the normal ear can detect (about  $10^{-12}$  watts/m<sup>2</sup>) to the highest that can be withstood without physical pain (about 10 watts/m<sup>2</sup>). If we were to use a linear scale to represent this range of human sensitivity it would encompass a billion units. Clearly this would be an unmanageable scale yielding unwieldy numbers.
- The scale can be compressed by converting it to a logarithmic or Bel scale, the number of Bels being the logarithm to the base 10 of one value to another (as applied by Alexander Graham Bell to measure the intensity of electric currents). The Bel scale gives a compressed range of 0 to 12 units which in practice is a little too compressed. A change of 1 Bel represents a doubling or halving of loudness to the average listener. A more practical operating range of 0 to 120 is obtained by multiplying by 10, i.e. 10 x Bel, which produces the scale units known as decibels or dB.
- Examples of typical sound intensity levels within the decibel range of 0 to 120 dB are listed below:

Four engine jet aircraft at 100m	120 dB
Riveting of steel plate at 10m	105 dB
Pneumatic drill at 10m	90 dB
Circular wood saw at 10m	80 dB
Heavy road traffic at 10m	75 dB
Telephone bell at 10m	65 dB
Male speech, average at 10m	50 dB
Whisper at 10m	25 dB
Threshold of hearing, 1000 Hz	0 dB

- Due to this logarithmic scale noise levels have to be combined logarithmically rather than arithmetically. For example, two equal sound sources of 70 dB each, when operated simultaneously, do not produce a combined level of 140 dB but instead result in a level of 73 dB, i.e. a rise of 3 dB for each doubling of sound intensity. Subjectively, a

3 dB change does not represent a doubling or halving of loudness; to make a sound appear twice as loud requires an increase in sound pressure level of about 10 dB.

- The sensitivity of the human ear to different acoustic frequencies of sound can be taken into account when measuring or calculating noise by applying a filter or weighting which equates to the frequency response of the human ear. This is referred to as an A-weighting and when applied results in noise levels expressed as dB(A). dB(A) noise levels reflect the human perception of loudness.
- Due to the often broadband and variable nature of environmental noises such as traffic, people exposed to different levels of noise do not make consistently different judgements about the noise climate until the difference in average noise level is about 3 dB(A). This is equivalent to a doubling of sound energy or, for example, a doubling of traffic flow. However, individuals are able to detect much lesser changes in noise exposure in any given situation and under ideal conditions can detect differences of as little as 1dB.
- Noise levels that fluctuate over time can be measured using a variety of noise indices. One index that correlates fairly well with community annoyance due to road traffic noise is the  $L_{A10(18\text{-hour})}$  noise index. The  $L_{A10}$  is the A-weighted sound level exceeded for 10% of the time, and the  $L_{A10(18\text{-hour})}$  is the arithmetic mean of the 18 hourly  $L_{A10}$  values during the period 6am to midnight (0600 to 2400 hours).
- An alternative index used in the UK to characterise intermittent sources of noise such as railways or construction sites is the equivalent continuous noise level,  $L_{Aeq}$ . It is a measure of the total sound energy generated by a fluctuating sound signal within a given time period and can be derived by 'spreading' the total sound energy evenly over the same time period as the fluctuating signal, hence the term 'equivalent continuous noise level'.
- Other useful noise units include the  $L_{Amax}$ , which is the maximum A-weighted sound level often used to characterise single events, and the  $L_{A90}$  which is the level of noise exceeded for 90% of the time and is an indicator of the background noise levels in the absence of specific sources such as traffic.

## **APPENDIX D**

**Front Elevation**  
**Fri 23rd Jun to Mon 26th**

<b>Date &amp; time</b>	<b>LAeq</b>	<b>LAmaz</b>	<b>LA10</b>	<b>LA90</b>
23/06/2017 12:07:30	70.3	80.4	73.2	65
23/06/2017 12:12:30	70.4	86.4	73.5	63
23/06/2017 12:17:30	70.8	78.8	74.8	62.4
23/06/2017 12:22:30	72.5	92.1	73.4	62.4
23/06/2017 12:27:30	73	91.3	73.8	62.4
23/06/2017 12:32:30	69.9	80.9	73	63.4
23/06/2017 12:37:30	70.8	83.4	74.3	63.7
23/06/2017 12:42:30	74.2	90.4	75.6	64.3
23/06/2017 12:47:30	71.6	83.3	74.9	64.1
23/06/2017 12:52:30	70.6	81.8	74.1	64
23/06/2017 12:57:30	74.6	93.3	74.8	62.7
23/06/2017 13:02:30	72	83.3	75.3	63.1
23/06/2017 13:07:30	69.8	84.1	72.9	61.5
23/06/2017 13:12:30	71.5	90.4	73.7	62.8
23/06/2017 13:17:30	69.9	80	73.3	62.5
23/06/2017 13:22:30	70.9	80.4	74.9	62
23/06/2017 13:27:30	74.1	88.3	77.8	63.2
23/06/2017 13:32:30	69.1	81.9	72.5	62.3
23/06/2017 13:37:30	69.6	81.5	73.4	61.3
23/06/2017 13:42:30	70	82.6	73.1	62.2
23/06/2017 13:47:30	69.7	84.7	72.7	62.8
23/06/2017 13:52:30	71.2	83.7	74.4	64.2
23/06/2017 13:57:30	70.6	83.7	73.6	63.6
23/06/2017 14:02:30	71.8	81.9	75.5	62.7
23/06/2017 14:07:30	73.3	95.4	74.9	62.8
23/06/2017 14:12:30	71.8	86.6	74.4	63.1
23/06/2017 14:17:30	70	81.9	73.3	62.3
23/06/2017 14:22:30	69.9	82.8	72.4	64
23/06/2017 14:27:30	70.2	82.4	73	63.1
23/06/2017 14:32:30	74.9	93.1	76.9	62.9
23/06/2017 14:37:30	82.2	106.1	78.7	64.3
23/06/2017 14:42:30	74.4	88	76.9	66.1
23/06/2017 14:47:30	71.2	85.7	73.7	63.6
23/06/2017 14:52:30	70.3	83.6	73	63.7
23/06/2017 14:57:30	73.3	91.7	75	64.2
23/06/2017 15:02:30	72.9	93.2	73.7	64.4
23/06/2017 15:07:30	70.9	85.9	74.4	62.3
23/06/2017 15:12:30	70.8	86.8	74.2	62.8
23/06/2017 15:17:30	70.5	85.4	73.4	63.3
23/06/2017 15:22:30	69	83.5	71.8	62.1
23/06/2017 15:27:30	71.5	84.6	74.9	62
23/06/2017 15:32:30	74.7	96.7	75	64
23/06/2017 15:37:30	70	79	73.8	62.7
23/06/2017 15:42:30	71.3	84.6	75.3	63.6
23/06/2017 15:47:30	70.4	85.7	72.4	63.7

23/06/2017 15:52:30	71.4	94.8	74.4	62.8
23/06/2017 15:57:30	70.5	86	74.3	62.6
23/06/2017 16:02:30	72.3	82.6	76	65.5
23/06/2017 16:07:30	70.6	80.1	73.8	64
23/06/2017 16:12:30	72	87.7	74.1	63.5
23/06/2017 16:17:30	71.6	86.4	74.3	64.2
23/06/2017 16:22:30	78	96	77	63.8
23/06/2017 16:27:30	70.6	83	74.1	63.7
23/06/2017 16:32:30	73.8	91.8	74.5	64.6
23/06/2017 16:37:30	74	90.6	75.7	68
23/06/2017 16:42:30	71.8	86.4	74.5	64.2
23/06/2017 16:47:30	80.7	101.6	79.9	66.1
23/06/2017 16:52:30	71.5	83.9	74.6	65
23/06/2017 16:57:30	74.2	96.6	74.3	63.7
23/06/2017 17:02:30	72.7	89.2	75.7	64.5
23/06/2017 17:07:30	71.4	87.9	74.2	63.7
23/06/2017 17:12:30	70.6	83.1	73.9	63.2
23/06/2017 17:17:30	72	85	75.3	63.9
23/06/2017 17:22:30	74.1	90.8	75.7	66.1
23/06/2017 17:27:30	75.3	89	77.7	69.5
23/06/2017 17:32:30	75.5	90.6	78.1	69.8
23/06/2017 17:37:30	76.7	93.6	78	67.4
23/06/2017 17:42:30	69.9	84.3	72.7	63.2
23/06/2017 17:47:30	78.2	97.4	78.7	66.8
23/06/2017 17:52:30	74.1	85.9	77	68.9
23/06/2017 17:57:30	75	92.4	76.7	66.6
23/06/2017 18:02:30	73.4	85.5	76.3	67.4
23/06/2017 18:07:30	73.3	88	76.4	66.8
23/06/2017 18:12:30	71.8	81.3	75.3	64.7
23/06/2017 18:17:30	70.9	86.9	73.6	63.9
23/06/2017 18:22:30	70.7	83.9	73.7	63.2
23/06/2017 18:27:30	71.5	84.6	74.8	65
23/06/2017 18:32:30	70.5	82.2	73.7	65.2
23/06/2017 18:37:30	70.1	79.1	73.5	64.1
23/06/2017 18:42:30	74.9	92.9	75.9	64.4
23/06/2017 18:47:30	71.5	83.9	74.4	64.2
23/06/2017 18:52:30	71.1	85.1	73.6	64.3
23/06/2017 18:57:30	70.2	81.2	73.3	63.5
<b>Average</b>	73.2	86.8	74.7	64
<b>Maximum</b>	82.2	106.1	79.9	69.8
<b>Minimum</b>	69	78.8	71.8	61.3
<b>Evening</b>				
23/06/2017 19:02:30	71.4	86.5	74.4	64.5
23/06/2017 19:07:30	71.6	87.1	74.3	65.2
23/06/2017 19:12:30	70.5	85.3	73.7	64
23/06/2017 19:17:30	71.5	86.3	74	65.6
23/06/2017 19:22:30	70.5	83.2	73.1	65.5
23/06/2017 19:27:30	70.6	83.5	73.3	65.5



23/06/2017 19:32:30	73.1	91.7	74.4	65.5
23/06/2017 19:37:30	71.3	86.8	73.8	65.1
23/06/2017 19:42:30	70.5	79.5	73.7	64.8
23/06/2017 19:47:30	84.3	112.1	76.1	65.4
23/06/2017 19:52:30	72.1	88.3	73.7	65
23/06/2017 19:57:30	71.9	90.2	73.7	64.3
23/06/2017 20:02:30	72.6	89.7	74.9	65.7
23/06/2017 20:07:30	73.9	87.5	76.7	68.3
23/06/2017 20:12:30	71.9	89.5	74.3	66
23/06/2017 20:17:30	72.7	86.1	75.2	66.6
23/06/2017 20:22:30	74.2	90.4	76.2	67.8
23/06/2017 20:27:30	73.1	92.2	74.7	67.3
23/06/2017 20:32:30	73.1	86.8	75.7	67.6
23/06/2017 20:37:30	75.7	97.2	76.4	68.9
23/06/2017 20:42:30	73.4	90.6	75.2	68.1
23/06/2017 20:47:30	72.4	88.4	74.3	67.8
23/06/2017 20:52:30	71.5	79.1	74.2	67.2
23/06/2017 20:57:30	77.8	95.5	79.8	66.8
23/06/2017 21:02:30	72.2	86.2	74.6	66.2
23/06/2017 21:07:30	73	91.2	73.5	65.5
23/06/2017 21:12:30	70.1	82.7	72.7	65.8
23/06/2017 21:17:30	71.5	85.2	74.1	66.6
23/06/2017 21:22:30	72.6	87.3	75.5	66.5
23/06/2017 21:27:30	70.3	83.1	72.4	64.1
23/06/2017 21:32:30	69.1	80.7	72.3	63
23/06/2017 21:37:30	69.9	83.4	73	64.2
23/06/2017 21:42:30	69.8	81.6	72.2	64.6
23/06/2017 21:47:30	72.1	87.6	73.9	63.6
23/06/2017 21:52:30	69.7	83.1	72.5	62.8
23/06/2017 21:57:30	70.3	81.5	73.5	64
23/06/2017 22:02:30	70.6	87	72.8	64.3
23/06/2017 22:07:30	70.6	86.9	73.3	64.8
23/06/2017 22:12:30	76.1	93.9	77	65.6
23/06/2017 22:17:30	77.6	100.1	75.7	66.2
23/06/2017 22:22:30	69.9	90.9	71.7	65.6
23/06/2017 22:27:30	72.2	89.1	74	65.3
23/06/2017 22:32:30	71.7	93.7	74.2	64.5
23/06/2017 22:37:30	73.2	93.2	74.9	65.8
23/06/2017 22:42:30	70.8	82.2	73.2	66.2
23/06/2017 22:47:30	73.6	92.5	75	66
23/06/2017 22:52:30	73.1	95.7	75.2	66.6
23/06/2017 22:57:30	73.5	87.7	75.9	67.1
<b>Average</b>	73.7	88.3	74.4	65.7
<b>Maximum</b>	84.3	112.1	79.8	68.9
<b>Minimum</b>	69.1	79.1	71.7	62.8
<b>Night</b>				
23/06/2017 23:02:30	73	89.5	75.4	67.2
23/06/2017 23:07:30	74.9	92.5	77.1	68.1

23/06/2017 23:12:30	74.5	90.1	77.1	66.8
23/06/2017 23:17:30	80.4	102.4	82.2	68.5
23/06/2017 23:22:30	77.5	97.2	78.7	69.9
23/06/2017 23:27:30	74.9	85.5	77.5	69.9
23/06/2017 23:32:30	75.8	93.2	77.8	69.4
23/06/2017 23:37:30	75.4	88.7	78	69.6
23/06/2017 23:42:30	79.2	99.2	78.8	69.8
23/06/2017 23:47:30	73	85.8	75.6	69
23/06/2017 23:52:30	75.2	97.4	75.6	67.5
23/06/2017 23:57:30	72.7	83.7	75.4	67.7
24/06/2017 00:02:30	72.8	87	75.8	67.4
24/06/2017 00:07:30	74.5	90.1	77.4	69.3
24/06/2017 00:12:30	75.4	89.5	77.9	70.2
24/06/2017 00:17:30	73.3	86.5	75.5	69.3
24/06/2017 00:22:30	77.1	97.1	75.9	69.6
24/06/2017 00:27:30	79	96.6	78.5	69.2
24/06/2017 00:32:30	73.5	84.2	76	69
24/06/2017 00:37:30	74.2	88.9	76.3	70
24/06/2017 00:42:30	76	90.6	78	70.3
24/06/2017 00:47:30	75.9	93.1	78.4	71
24/06/2017 00:52:30	77.8	93.1	80.6	71.3
24/06/2017 00:57:30	77.7	92.2	80.5	70
24/06/2017 01:02:30	76	90.4	78.6	69.1
24/06/2017 01:07:30	79.2	96.3	82.5	68.4
24/06/2017 01:12:30	80	95.7	83.6	67.8
24/06/2017 01:17:30	70	83.7	72.9	64.9
24/06/2017 01:22:30	70.3	82	73	65.1
24/06/2017 01:27:30	76.7	93	79.7	68.1
24/06/2017 01:32:30	76.3	92.8	78	68.1
24/06/2017 01:37:30	76.8	95.6	78.7	68.4
24/06/2017 01:42:30	81.1	98.8	84.2	69.3
24/06/2017 01:47:30	70.6	79.7	73.4	66.1
24/06/2017 01:52:30	72.2	82	74.8	67.6
24/06/2017 01:57:30	72	82.4	74.8	66.6
24/06/2017 02:02:30	70.9	82.6	73.7	65.5
24/06/2017 02:07:30	70.3	88.8	72.7	64.6
24/06/2017 02:12:30	71.8	92.5	74.4	64.1
24/06/2017 02:17:30	69.5	81.2	72.5	63.7
24/06/2017 02:22:30	71.9	86.3	75	64.6
24/06/2017 02:27:30	71.9	85.9	74.8	65.2
24/06/2017 02:32:30	70.6	94.7	72.4	64.5
24/06/2017 02:37:30	69.7	86	71.9	62.7
24/06/2017 02:42:30	71	83.3	74.1	63.7
24/06/2017 02:47:30	69.6	84.8	71.8	62.8
24/06/2017 02:52:30	68.6	80.2	71.8	61.7
24/06/2017 02:57:30	74.7	100.7	72.9	62.8
24/06/2017 03:02:30	71.1	87.5	74.1	63.3
24/06/2017 03:07:30	68.4	80.3	71.7	62.7

24/06/2017 03:12:30	69.3	78.8	72.6	63.8
24/06/2017 03:17:30	69.7	83.8	72.6	63.5
24/06/2017 03:22:30	71.8	86.9	74.6	66.2
24/06/2017 03:27:30	73.2	87.2	75.9	66.6
24/06/2017 03:32:30	73.1	88.3	75.5	68
24/06/2017 03:37:30	72.6	90.6	75.2	65.7
24/06/2017 03:42:30	71.7	89.4	73.9	65.5
24/06/2017 03:47:30	71.2	84.1	74.2	62.8
24/06/2017 03:52:30	70.5	82.7	74	62.4
24/06/2017 03:57:30	69.2	90.6	70.7	58.6
24/06/2017 04:02:30	70.2	87	72.2	60.8
24/06/2017 04:07:30	67.7	79.6	70.9	59.7
24/06/2017 04:12:30	67.8	82.9	70.9	59
24/06/2017 04:17:30	65.9	82.5	69.2	57.4
24/06/2017 04:22:30	67.2	81	71	58.3
24/06/2017 04:27:30	68.3	83.4	71.7	56.7
24/06/2017 04:32:30	67.3	80.5	70.9	58
24/06/2017 04:37:30	70.6	87.9	74.2	58.4
24/06/2017 04:42:30	68.1	81.6	71.3	57.6
24/06/2017 04:47:30	66.1	81.1	69.6	54.1
24/06/2017 04:52:30	66.8	77.2	71.3	55.9
24/06/2017 04:57:30	69	88.9	71.1	55.8
24/06/2017 05:02:30	70.2	88.2	72.8	54.6
24/06/2017 05:07:30	68.2	81.9	72.6	53.8
24/06/2017 05:12:30	63	73.9	67.7	54.1
24/06/2017 05:17:30	66.8	79.6	71.3	55.7
24/06/2017 05:22:30	66.5	82.2	70.4	54.6
24/06/2017 05:27:30	67	81	71.2	54.1
24/06/2017 05:32:30	67.4	79.1	72.2	55.3
24/06/2017 05:37:30	65.8	79.7	68.4	53.2
24/06/2017 05:42:30	67.8	84.5	72.6	56.4
24/06/2017 05:47:30	62.8	74.6	67.5	52.3
24/06/2017 05:52:30	66.4	79.3	71.2	54.6
24/06/2017 05:57:30	68.6	81.3	73.2	55.7
24/06/2017 06:02:30	64.9	76.4	69.6	55.3
24/06/2017 06:07:30	71.1	90.4	72.6	55
24/06/2017 06:12:30	64.2	77.6	68.6	51.6
24/06/2017 06:17:30	68.6	86	71.7	53
24/06/2017 06:22:30	64.7	76	69.6	51
24/06/2017 06:27:30	68.5	82.1	73.2	53.2
24/06/2017 06:32:30	66.1	81.4	69.8	54.4
24/06/2017 06:37:30	65.6	78.9	70.2	53.8
24/06/2017 06:42:30	70.1	89.8	72.7	54.9
24/06/2017 06:47:30	66.7	83.2	70.7	51.8
24/06/2017 06:52:30	67.5	79.2	71.7	57.1
24/06/2017 06:57:30	72.5	90.3	73.7	54.8
<b>Average</b>	73.4	86.4	74.1	62.5
<b>Maximum</b>	81.1	102.4	84.2	71.3

<b>Minimum Day</b>	62.8	73.9	67.5	51
24/06/2017 07:02:30	69.6	86.6	72.4	52.5
24/06/2017 07:07:30	69.9	83.5	74.4	56.7
24/06/2017 07:12:30	66.2	80.2	70.1	56
24/06/2017 07:17:30	70.7	82.9	74.1	58.8
24/06/2017 07:22:30	71.3	90.1	72.7	55.2
24/06/2017 07:27:30	66.5	78.5	71.1	54.2
24/06/2017 07:32:30	68.7	89.3	71.1	56
24/06/2017 07:37:30	73.6	97.1	72.1	54.5
24/06/2017 07:42:30	68.3	83.8	71.5	54.7
24/06/2017 07:47:30	67.2	78.3	71	57.3
24/06/2017 07:52:30	67.7	80.3	71.5	58.1
24/06/2017 07:57:30	65.9	75.8	70	57.5
24/06/2017 08:02:30	68.7	84	72.6	58.7
24/06/2017 08:07:30	77.8	100.4	77	60.2
24/06/2017 08:12:30	68.7	82.7	72.2	60
24/06/2017 08:17:30	67.9	79.4	71.4	60.2
24/06/2017 08:22:30	70.7	88.4	72.5	59.6
24/06/2017 08:27:30	69.1	81.1	73.2	60.5
24/06/2017 08:32:30	67.8	80.5	71.4	58.8
24/06/2017 08:37:30	68.3	80.3	72.8	58.6
24/06/2017 08:42:30	69.2	83.8	72.7	59
24/06/2017 08:47:30	69.7	83.6	73.5	59.4
24/06/2017 08:52:30	68.3	78.8	71.8	60.5
24/06/2017 08:57:30	70.7	85.4	73.3	59.3
24/06/2017 09:02:30	67.4	79.7	70.9	57.7
24/06/2017 09:07:30	68	80.6	71.2	57.5
24/06/2017 09:12:30	69.5	83	73.2	58.2
24/06/2017 09:17:30	73.6	93.3	74.2	58.1
24/06/2017 09:22:30	69.6	82.2	72.5	59
24/06/2017 09:27:30	69.4	83.6	72.9	59.1
24/06/2017 09:32:30	69.6	86	72.5	58.7
24/06/2017 09:37:30	70.2	92.4	73	60.3
24/06/2017 09:42:30	68.8	81.2	72.7	57.7
24/06/2017 09:47:30	68.6	80.1	72.1	59
24/06/2017 09:52:30	77.5	99.8	74.3	59.6
24/06/2017 09:57:30	67.8	81.7	71.5	57.9
24/06/2017 10:02:30	69.3	83	73.2	58.1
24/06/2017 10:07:30	70	86.8	72.7	58.2
24/06/2017 10:12:30	66.3	75.5	69.7	59.4
24/06/2017 10:17:30	66.7	79.1	70	57.6
24/06/2017 10:22:30	67.6	78.1	71.6	58.2
24/06/2017 10:27:30	67.8	82.5	70.6	58.9
24/06/2017 10:32:30	67.8	79	71.5	58.4
24/06/2017 10:37:30	68.2	78.6	71.8	59.2
24/06/2017 10:42:30	76.3	99.7	71.9	59.7
24/06/2017 10:47:30	69.9	84.6	73	59

24/06/2017 10:52:30	68.6	80.9	71.9	59.9
24/06/2017 10:57:30	70.4	82.4	73.8	60.3
24/06/2017 11:02:30	67.9	79.3	71.4	58.8
24/06/2017 11:07:30	69	89.3	71	59.1
24/06/2017 11:12:30	77.7	96.2	73.3	59.1
24/06/2017 11:17:30	70.1	84.1	72.7	59.2
24/06/2017 11:22:30	71.4	88	73.9	58.1
24/06/2017 11:27:30	71.6	92.8	71.7	59.7
24/06/2017 11:32:30	69.9	83.2	73.6	61
24/06/2017 11:37:30	69.9	81.5	73.4	61
24/06/2017 11:42:30	67.3	79.5	70.1	60
24/06/2017 11:47:30	68.5	82.7	71.4	59.6
24/06/2017 11:52:30	81	103.4	75.5	60
24/06/2017 11:57:30	67.9	80.8	71.5	59.7
24/06/2017 12:02:30	82.6	109.2	74.7	60.8
24/06/2017 12:07:30	67.3	78.2	70.4	59.3
24/06/2017 12:12:30	68.1	81.1	71.3	61
24/06/2017 12:17:30	74.5	94.1	74.4	61.7
24/06/2017 12:22:30	69.6	83.3	73	60.2
24/06/2017 12:27:30	67.6	79.8	70.8	60.3
24/06/2017 12:32:30	69.2	78.1	72.8	62.3
24/06/2017 12:37:30	69.4	80.7	72.8	60.3
24/06/2017 12:42:30	69.4	79	72.5	62
24/06/2017 12:47:30	69.9	79.9	73.3	64.7
24/06/2017 12:52:30	69.4	81.5	72.7	63.6
24/06/2017 12:57:30	70.8	81.2	74.2	63.8
24/06/2017 13:02:30	69.5	81.9	72.5	60.5
24/06/2017 13:07:30	67.9	84.3	71.1	58.8
24/06/2017 13:12:30	66.8	77.7	70.5	58.2
24/06/2017 13:17:30	68.6	80.6	72	60.7
24/06/2017 13:22:30	69.1	78.8	72.7	60.3
24/06/2017 13:27:30	68.1	83.5	71.6	59.7
24/06/2017 13:32:30	68.2	77.9	71.3	60.7
24/06/2017 13:37:30	70.5	93.7	72.8	62.1
24/06/2017 13:42:30	69.9	88.5	72	62.3
24/06/2017 13:47:30	69.9	84.5	73	60.7
24/06/2017 13:52:30	68.8	79.1	72.3	60.9
24/06/2017 13:57:30	67.4	76	70.6	61.3
24/06/2017 14:02:30	70.8	96	72.3	62.2
24/06/2017 14:07:30	73.2	94.3	73.3	61
24/06/2017 14:12:30	69.7	87.8	71.6	60.6
24/06/2017 14:17:30	71.2	93.2	73.4	63.6
24/06/2017 14:22:30	73.2	87.4	73.9	64.3
24/06/2017 14:27:30	69.1	81.3	71.7	62.9
24/06/2017 14:32:30	71.8	88.5	73.4	62.7
24/06/2017 14:37:30	68.9	77.8	72.1	62.4
24/06/2017 14:42:30	69.7	78.9	72.8	64.1
24/06/2017 14:47:30	69.9	81.2	72.4	64.6

24/06/2017 14:52:30	72.4	96.5	72.9	63.4
24/06/2017 14:57:30	68.4	82.7	71.5	60.4
24/06/2017 15:02:30	78.4	101.5	74.1	62.1
24/06/2017 15:07:30	69.4	82.2	72.2	61.3
24/06/2017 15:12:30	67.9	76.6	71	60.7
24/06/2017 15:17:30	68	79.3	71.2	60.6
24/06/2017 15:22:30	72.9	94.9	73.9	62.4
24/06/2017 15:27:30	68.6	83.3	71.8	61.2
24/06/2017 15:32:30	70	85.5	72.6	61.2
24/06/2017 15:37:30	68.4	79.6	71.9	61
24/06/2017 15:42:30	67.6	78.7	71.3	59.5
24/06/2017 15:47:30	72.2	89.9	73	60.7
24/06/2017 15:52:30	70.6	92.7	70.9	60.7
24/06/2017 15:57:30	68.3	80.9	71.3	61.8
24/06/2017 16:02:30	71.8	87	74.3	63.7
24/06/2017 16:07:30	69.1	80.4	72.4	62.8
24/06/2017 16:12:30	68.7	82.7	71.9	61.6
24/06/2017 16:17:30	68.2	82.8	71	61.2
24/06/2017 16:22:30	69.5	90.8	71.6	61.5
24/06/2017 16:27:30	77.1	99.5	75.1	63.1
24/06/2017 16:32:30	68.4	78.6	71.9	61.2
24/06/2017 16:37:30	69.6	86.9	72	62
24/06/2017 16:42:30	69.8	83.7	72.8	63.1
24/06/2017 16:47:30	67.4	78.3	71	60.3
24/06/2017 16:52:30	71.1	92.8	72.3	62.6
24/06/2017 16:57:30	69.6	87.2	72.5	61.9
24/06/2017 17:02:30	68.2	77.4	70.9	62.2
24/06/2017 17:07:30	66.9	77.6	69.9	60.8
24/06/2017 17:12:30	67.8	76.6	70.9	62.8
24/06/2017 17:17:30	68.6	80.4	71.8	62.4
24/06/2017 17:22:30	74.5	93.9	73.6	63.2
24/06/2017 17:27:30	67.2	84.3	69.5	62.1
24/06/2017 17:32:30	78.3	99.6	75.4	64.3
24/06/2017 17:37:30	68.8	81.4	71.6	64
24/06/2017 17:42:30	67.7	77.8	70.6	62.5
24/06/2017 17:47:30	69.8	83.1	73.3	63.1
24/06/2017 17:52:30	71.7	89.3	73.4	63.8
24/06/2017 17:57:30	71.4	88.4	73.1	62.6
24/06/2017 18:02:30	68.5	78.2	71.8	62.7
24/06/2017 18:07:30	69.5	81.9	72	62.8
24/06/2017 18:12:30	69.9	86.6	71.5	63.3
24/06/2017 18:17:30	71.4	84.8	74.6	62.2
24/06/2017 18:22:30	71.6	88.9	73.7	61.5
24/06/2017 18:27:30	68.8	82.2	71.4	62.9
24/06/2017 18:32:30	70.6	81.8	73.8	63.4
24/06/2017 18:37:30	71	88.8	74	64
24/06/2017 18:42:30	69.6	82.7	72.8	62.2
24/06/2017 18:47:30	70.7	83.3	74.1	63.1

24/06/2017 18:52:30	70.2	81.5	73.4	63.5
24/06/2017 18:57:30	70.8	90.2	73.9	62
<b>Average</b>	70.1	84.6	72.4	60.5
<b>Maximum</b>	82.6	109.2	77	64.7
<b>Minimum</b>	65.9	75.5	69.5	52.5
<b>Evening</b>				
24/06/2017 19:02:30	70.9	93.1	72.3	63
24/06/2017 19:07:30	68.2	79.7	71	63.4
24/06/2017 19:12:30	68.3	80.4	71.3	62.4
24/06/2017 19:17:30	75	92.8	76	61.7
24/06/2017 19:22:30	68.7	82.3	71.9	61.4
24/06/2017 19:27:30	71.4	89	74	63
24/06/2017 19:32:30	69.5	87.9	71.8	62
24/06/2017 19:37:30	73.2	93	72.6	61.9
24/06/2017 19:42:30	68.6	84.6	70.8	61.7
24/06/2017 19:47:30	68.6	79.4	71.9	62
24/06/2017 19:52:30	68.8	85.5	71.4	61.6
24/06/2017 19:57:30	68.7	79.1	71.8	61
24/06/2017 20:02:30	75.1	104.5	72.6	61.9
24/06/2017 20:07:30	70.5	87	73.4	62.6
24/06/2017 20:12:30	70	90.6	72.3	63.1
24/06/2017 20:17:30	71	95.4	71.9	63.2
24/06/2017 20:22:30	69.6	81.3	73	63.6
24/06/2017 20:27:30	68.8	83.8	70.8	60.6
24/06/2017 20:32:30	67.9	79.5	71.2	60.8
24/06/2017 20:37:30	68.3	80.6	71.1	62
24/06/2017 20:42:30	68.7	80.7	72.1	60.8
24/06/2017 20:47:30	72.4	92.7	71.3	60.5
24/06/2017 20:52:30	68.3	81.6	71.1	61.4
24/06/2017 20:57:30	74.5	91.1	75.4	62.5
24/06/2017 21:02:30	72.1	87.6	75.3	61.8
24/06/2017 21:07:30	75.2	93.8	75.6	63.5
24/06/2017 21:12:30	76.9	98.8	78.1	63.3
24/06/2017 21:17:30	74.7	96.2	75.2	62.5
24/06/2017 21:22:30	68.4	82.6	71.3	60
24/06/2017 21:27:30	67.5	80.4	70.8	60.2
24/06/2017 21:32:30	67.4	81	70.4	60.3
24/06/2017 21:37:30	68.1	81	71.2	60.9
24/06/2017 21:42:30	67.4	80	70.7	59.4
24/06/2017 21:47:30	68.5	85.8	70.6	60
24/06/2017 21:52:30	67.5	77.9	70.6	60.1
24/06/2017 21:57:30	70.7	87.2	72.9	61
24/06/2017 22:02:30	68.7	83.2	71.3	61.2
24/06/2017 22:07:30	66.7	76.5	70.3	60.6
24/06/2017 22:12:30	68.1	81.3	70.8	61.7
24/06/2017 22:17:30	68.9	80.6	72.1	63.1
24/06/2017 22:22:30	72.9	90	74.6	64.1
24/06/2017 22:27:30	68.7	82.6	71.5	63.8

24/06/2017 22:32:30	71.9	88.8	73.9	63.5
24/06/2017 22:37:30	69	82.7	71.3	64.2
24/06/2017 22:42:30	69.7	83.3	72.5	63.3
24/06/2017 22:47:30	70.6	85.6	73.2	64.3
24/06/2017 22:52:30	70.6	84.7	72.9	63.5
24/06/2017 22:57:30	76.9	98.5	75.8	64
<b>Average</b>	71.2	86	72.4	62.1
<b>Maximum</b>	76.9	104.5	78.1	64.3
<b>Minimum</b>	66.7	76.5	70.3	59.4
<b>Night</b>				
24/06/2017 23:02:30	75.5	92.1	79	65
24/06/2017 23:07:30	72.6	95.2	74.5	63.7
24/06/2017 23:12:30	77.5	99.4	77.9	64.5
24/06/2017 23:17:30	71.8	86.8	74.1	65.8
24/06/2017 23:22:30	73.2	87	75.9	66.2
24/06/2017 23:27:30	74.1	88.6	76.9	67.6
24/06/2017 23:32:30	76	91	78.7	68.2
24/06/2017 23:37:30	72.5	84.6	75	67.3
24/06/2017 23:42:30	72.6	86.2	75.4	67.1
24/06/2017 23:47:30	75.9	93.5	76.7	67
24/06/2017 23:52:30	72.8	88.8	75.2	66.9
24/06/2017 23:57:30	72	84.9	74.4	67.8
25/06/2017 00:02:30	71.7	81.6	74.1	68
25/06/2017 00:07:30	75.6	91.6	76.9	68.6
25/06/2017 00:12:30	73.1	87.1	75.7	67.9
25/06/2017 00:17:30	75.5	91.2	78.2	68.7
25/06/2017 00:22:30	76.4	96.7	78.4	68.8
25/06/2017 00:27:30	72	87.9	74.7	66.7
25/06/2017 00:32:30	72.7	89.7	74.8	67.3
25/06/2017 00:37:30	73.2	89.5	75.4	67.2
25/06/2017 00:42:30	75.2	93.1	77.5	68.1
25/06/2017 00:47:30	77.8	93.3	81.2	70.2
25/06/2017 00:52:30	74.6	85.7	77.3	69.8
25/06/2017 00:57:30	76	91.2	78.8	70
25/06/2017 01:02:30	73.8	92	76.5	67.7
25/06/2017 01:07:30	74.2	87.6	76.7	69.1
25/06/2017 01:12:30	72.3	85.5	74.9	66.9
25/06/2017 01:17:30	75.2	94.5	75.3	67.9
25/06/2017 01:22:30	72.8	91	75.1	67
25/06/2017 01:27:30	74	97.8	73.7	65.9
25/06/2017 01:32:30	71.8	86.4	74.5	66.2
25/06/2017 01:37:30	71.3	84.8	73.8	65.2
25/06/2017 01:42:30	71.2	84.7	73.7	66
25/06/2017 01:47:30	71	87.7	73.1	66.3
25/06/2017 01:52:30	73.5	85.8	76.3	67.4
25/06/2017 01:57:30	72.7	88.6	75.3	66.5
25/06/2017 02:02:30	73.6	94.5	74	65.1
25/06/2017 02:07:30	70.9	89.5	73.4	65.2



25/06/2017 02:12:30	71.6	83.9	74.3	66.5
25/06/2017 02:17:30	70.8	85.5	73.6	65.5
25/06/2017 02:22:30	71	86.6	73.5	65.7
25/06/2017 02:27:30	71.2	84.4	74.3	65.1
25/06/2017 02:32:30	70.8	83.9	73.8	65
25/06/2017 02:37:30	69.7	80.2	72.4	63.3
25/06/2017 02:42:30	70	82.5	72.5	64.9
25/06/2017 02:47:30	68.4	82.5	71.7	62.7
25/06/2017 02:52:30	70.5	83.4	73.5	63.5
25/06/2017 02:57:30	69.7	87.3	71.9	64.8
25/06/2017 03:02:30	69.6	82.7	71.8	64
25/06/2017 03:07:30	71.1	84	74.4	65.4
25/06/2017 03:12:30	72.2	89.8	74.3	65.5
25/06/2017 03:17:30	72	85.4	74.7	66.6
25/06/2017 03:22:30	72.8	87	75.5	65.6
25/06/2017 03:27:30	76.1	93.7	77.7	68
25/06/2017 03:32:30	73	87	75.5	67.1
25/06/2017 03:37:30	73.5	91.2	76.2	64.8
25/06/2017 03:42:30	75.7	88.4	79.4	65.6
25/06/2017 03:47:30	72	83.3	75.5	64.1
25/06/2017 03:52:30	74.8	93.3	78	66
25/06/2017 03:57:30	76.6	95.1	80.3	65
25/06/2017 04:02:30	73.2	87	76.4	64.6
25/06/2017 04:07:30	76.4	91.6	80.1	62.8
25/06/2017 04:12:30	67.4	79.8	70.9	58
25/06/2017 04:17:30	68.2	83.5	72.2	59.5
25/06/2017 04:22:30	70.3	89.1	70.9	58.3
25/06/2017 04:27:30	68.4	85.9	72.4	56.4
25/06/2017 04:32:30	67.3	85.4	71	57.1
25/06/2017 04:37:30	66.4	83.2	70.6	55.9
25/06/2017 04:42:30	65.6	76.3	70	54.7
25/06/2017 04:47:30	63.3	74.6	68.5	52.1
25/06/2017 04:52:30	67.6	81.6	71	55.1
25/06/2017 04:57:30	66.3	81.3	70.4	55.2
25/06/2017 05:02:30	65.2	78.1	69.3	53.7
25/06/2017 05:07:30	64.6	75.2	69.1	54.5
25/06/2017 05:12:30	64.1	78.5	67.1	52.3
25/06/2017 05:17:30	68.3	86.8	71.7	55.3
25/06/2017 05:22:30	65.2	78.7	69.4	51.9
25/06/2017 05:27:30	64.4	74.9	69.4	52.7
25/06/2017 05:32:30	66.7	78.5	71.4	55
25/06/2017 05:37:30	64.6	77.4	69.5	52.8
25/06/2017 05:42:30	64.8	75.1	69.6	52.3
25/06/2017 05:47:30	67.1	82.8	70.9	55.9
25/06/2017 05:52:30	66.1	80.1	69.3	53.6
25/06/2017 05:57:30	64.8	78.2	69.5	52.5
25/06/2017 06:02:30	67	80.9	70.8	56.1
25/06/2017 06:07:30	68.8	86.7	71.1	56.4

25/06/2017 06:12:30	63.5	75.3	67.8	53
25/06/2017 06:17:30	64.1	77.1	68.7	52.5
25/06/2017 06:22:30	62.6	77.9	67.3	51.4
25/06/2017 06:27:30	65	77.7	69.6	54.2
25/06/2017 06:32:30	64.5	79.4	68.9	53.3
25/06/2017 06:37:30	73.1	93.9	70.5	53.5
25/06/2017 06:42:30	65.4	77	70	54.7
25/06/2017 06:47:30	64.9	76.6	68.2	60.1
25/06/2017 06:52:30	70.3	85.5	73.3	60.1
25/06/2017 06:57:30	67.7	82.4	70.7	56.3
<b>Average</b>	72.2	85.6	73.6	62.3
<b>Maximum</b>	77.8	99.4	81.2	70.2
<b>Minimum</b>	62.6	74.6	67.1	51.4
<b>Day</b>				
25/06/2017 07:02:30	75.9	97.8	70.3	52.3
25/06/2017 07:07:30	70.3	87.5	72	54.4
25/06/2017 07:12:30	69.3	86.9	72.3	55.3
25/06/2017 07:17:30	66.5	81.2	70.4	54.4
25/06/2017 07:22:30	66.7	78.2	70.7	56.9
25/06/2017 07:27:30	64.5	78.6	68.9	53
25/06/2017 07:32:30	67.4	83	71.3	55.6
25/06/2017 07:37:30	63.9	74.8	68.8	55.3
25/06/2017 07:42:30	79.8	102	74.5	55.2
25/06/2017 07:47:30	64.8	78.9	69.2	54.1
25/06/2017 07:52:30	64.3	77.9	68.9	54.4
25/06/2017 07:57:30	70.8	92.3	70.5	54
25/06/2017 08:02:30	62.7	74.3	67.8	52.2
25/06/2017 08:07:30	65.9	79.6	70.1	53.9
25/06/2017 08:12:30	66.3	77.9	71.3	54.7
25/06/2017 08:17:30	65.1	78.4	69.2	53.1
25/06/2017 08:22:30	64.7	77.1	69.1	53.9
25/06/2017 08:27:30	62.6	74.7	67.7	52.5
25/06/2017 08:32:30	66.5	81.6	69.9	54.1
25/06/2017 08:37:30	65.7	82	69.3	53.7
25/06/2017 08:42:30	68.1	83.9	71.7	55.1
25/06/2017 08:47:30	69.9	87.6	72.3	55.5
25/06/2017 08:52:30	73.4	93.5	72.3	57
25/06/2017 08:57:30	65.8	75.9	70	55.1
25/06/2017 09:02:30	62.5	79.6	67.3	52.5
25/06/2017 09:07:30	66.2	90.7	69.6	54.7
25/06/2017 09:12:30	67.3	82.4	70.5	53.9
25/06/2017 09:17:30	66.3	82.4	69.9	53.8
25/06/2017 09:22:30	74.5	99	72.3	54.5
25/06/2017 09:27:30	67.3	80.9	70.6	55.5
25/06/2017 09:32:30	66.3	88.2	69.4	54.5
25/06/2017 09:37:30	72	93.1	71.2	55.3
25/06/2017 09:42:30	67.5	80.1	71.3	56.4
25/06/2017 09:47:30	66.8	83.4	70.4	55.3

25/06/2017 09:52:30	67.6	79.3	72.1	56.3
25/06/2017 09:57:30	66.6	78.2	70.7	55.3
25/06/2017 10:02:30	65	78.1	69.6	54.3
25/06/2017 10:07:30	76.4	93.6	73.9	56
25/06/2017 10:12:30	70	84	73.1	57.6
25/06/2017 10:17:30	69.1	83.3	72.3	58.1
25/06/2017 10:22:30	68.4	86	71.4	57.2
25/06/2017 10:27:30	65.3	81.3	69.3	55.6
25/06/2017 10:32:30	67.5	76.5	70.8	57.8
25/06/2017 10:37:30	68.5	85.3	71.3	57.9
25/06/2017 10:42:30	65.5	76.9	69.2	57.5
25/06/2017 10:47:30	67.7	80.3	70.2	58
25/06/2017 10:52:30	69.6	85.2	72.5	58.6
25/06/2017 10:57:30	82.5	107.1	72.8	59.1
25/06/2017 11:02:30	66.7	74.6	70.6	57.4
25/06/2017 11:07:30	68.1	77.5	71.9	60.5
25/06/2017 11:12:30	67.9	80.8	71.2	57.6
25/06/2017 11:17:30	67	80.9	70.4	59.2
25/06/2017 11:22:30	67.8	82.8	71.1	57.1
25/06/2017 11:27:30	66.6	77.9	69.9	58.2
25/06/2017 11:32:30	68.7	83.4	71	58.9
25/06/2017 11:37:30	67.2	78.4	70.3	56.5
25/06/2017 11:42:30	67.4	78.7	70.8	56.7
25/06/2017 11:47:30	67.7	81.6	70.7	56.3
25/06/2017 11:52:30	70.4	94.2	70.6	57.3
25/06/2017 11:57:30	70.1	82.5	73.5	62.2
25/06/2017 12:02:30	70.7	87.4	72.1	60.4
25/06/2017 12:07:30	67.7	89.2	70.4	57.3
25/06/2017 12:12:30	68.5	81.3	71.9	56.8
25/06/2017 12:17:30	67.3	80.7	70.6	58.3
25/06/2017 12:22:30	70.3	84.4	73.2	59.2
25/06/2017 12:27:30	69.6	82.7	72.9	58.5
25/06/2017 12:32:30	66.7	79	69.7	58.7
25/06/2017 12:37:30	66.9	79.3	69.8	59.2
25/06/2017 12:42:30	68.4	80.3	72.1	57.8
25/06/2017 12:47:30	73.4	98.8	71.7	59
25/06/2017 12:52:30	68.1	84.1	70.8	59.3
25/06/2017 12:57:30	68.5	78.8	71.8	60
25/06/2017 13:02:30	69	84.5	71.5	58.4
25/06/2017 13:07:30	67.2	77.3	70.3	60.1
25/06/2017 13:12:30	68	79.4	71.1	60.2
25/06/2017 13:17:30	67.6	82.9	71	58
25/06/2017 13:22:30	67.4	80.8	70.9	58.4
25/06/2017 13:27:30	67.3	77	70.5	59.4
25/06/2017 13:32:30	74.8	97	73.9	59.4
25/06/2017 13:37:30	66.4	78.1	69.7	58.9
25/06/2017 13:42:30	76	97.5	73.2	58.5
25/06/2017 13:47:30	66.8	78.2	70.3	58.6

25/06/2017 13:52:30	68	79.5	71.6	59.3
25/06/2017 13:57:30	69.7	82.4	72.8	60.2
25/06/2017 14:02:30	68.1	78.1	71.9	59.1
25/06/2017 14:07:30	67.5	79.1	70.9	59.9
25/06/2017 14:12:30	66.6	78.2	69.9	57.9
25/06/2017 14:17:30	67.4	77.9	70.8	59.3
25/06/2017 14:22:30	70.5	84.7	74.3	61
25/06/2017 14:27:30	66.9	79.3	69.8	59.6
25/06/2017 14:32:30	67.2	80.3	70.5	58.7
25/06/2017 14:37:30	67	76.3	70.8	57.5
25/06/2017 14:42:30	67.2	77.7	70.7	58.5
25/06/2017 14:47:30	67.3	77.9	70.3	59
25/06/2017 14:52:30	70.3	97.8	71.1	59.8
25/06/2017 14:57:30	67.2	79.2	70.6	58.9
25/06/2017 15:02:30	68.1	82.8	71.2	59.3
25/06/2017 15:07:30	67.7	79.4	71.2	60.1
25/06/2017 15:12:30	68.5	89.6	70.7	60.3
25/06/2017 15:17:30	67.2	79.3	70.1	59.4
25/06/2017 15:22:30	73.4	96.7	72.6	60.7
25/06/2017 15:27:30	68.6	82.3	71.7	59.5
25/06/2017 15:32:30	66.6	77.2	70	59.7
25/06/2017 15:37:30	67	77.3	70.3	59.7
25/06/2017 15:42:30	75.3	98	71.5	59.7
25/06/2017 15:47:30	68.9	82	72.1	60.6
25/06/2017 15:52:30	70.7	89	71.6	62.4
25/06/2017 15:57:30	68.2	81	71.2	60.4
25/06/2017 16:02:30	66.5	81	69.6	59.6
25/06/2017 16:07:30	68.1	82.3	70.8	59.4
25/06/2017 16:12:30	68.8	78.6	71.4	63.1
25/06/2017 16:17:30	70.5	87.3	72.2	61
25/06/2017 16:22:30	80.7	105.3	72.5	61.2
25/06/2017 16:27:30	70.1	85.6	73	61.6
25/06/2017 16:32:30	69	82.9	72	61.8
25/06/2017 16:37:30	67.1	77.6	70.5	60.5
25/06/2017 16:42:30	73.5	94.9	72.6	61
25/06/2017 16:47:30	70.2	86.7	72	61.5
25/06/2017 16:52:30	67.2	77.6	70.6	61.2
25/06/2017 16:57:30	74.2	92.4	73.7	61.3
25/06/2017 17:02:30	66.9	77.8	69.9	60
25/06/2017 17:07:30	68.9	86.7	71.8	60.4
25/06/2017 17:12:30	67.8	79.8	71.2	59.7
25/06/2017 17:17:30	67.3	80	71.2	59.3
25/06/2017 17:22:30	67.8	78.6	71.3	59.9
25/06/2017 17:27:30	66.3	78.2	69.5	60.2
25/06/2017 17:32:30	67.5	86.8	70.7	60.1
25/06/2017 17:37:30	67.1	79.8	70.4	60.3
25/06/2017 17:42:30	80.8	102.5	74	60.9
25/06/2017 17:47:30	67	77.7	70	61

25/06/2017 17:52:30	70.7	87.6	73.1	61
25/06/2017 17:57:30	68.4	84.8	71.6	60.6
25/06/2017 18:02:30	68.5	85.7	71.6	60
25/06/2017 18:07:30	68.1	83.5	70.7	60.6
25/06/2017 18:12:30	74.9	99.9	70.2	60.2
25/06/2017 18:17:30	68.6	79.6	72	61.9
25/06/2017 18:22:30	69.1	79.9	72.8	60.8
25/06/2017 18:27:30	69	88.3	71.4	60.3
25/06/2017 18:32:30	69.4	84.3	71.3	61
25/06/2017 18:37:30	67.9	80.1	70.8	60.4
25/06/2017 18:42:30	67.1	78.1	71	59.9
25/06/2017 18:47:30	68.2	79.7	71.1	61.2
25/06/2017 18:52:30	72	91.3	70.9	59.4
25/06/2017 18:57:30	70.1	85.5	72.6	60.3
<b>Average</b>	70.7	83.5	71.1	58.2
<b>Maximum</b>	82.5	107.1	74.5	63.1
<b>Minimum</b>	62.5	74.3	67.3	52.2
<b>Evening</b>				
25/06/2017 19:02:30	67.2	79.5	69.8	59.9
25/06/2017 19:07:30	69	86	71.2	60.2
25/06/2017 19:12:30	69.9	83.4	73	61.7
25/06/2017 19:17:30	68.2	89.7	70.6	60.1
25/06/2017 19:22:30	67.4	78.3	70.7	59.6
25/06/2017 19:27:30	68	78.2	71.8	59
25/06/2017 19:32:30	71.1	86.7	73.6	60.8
25/06/2017 19:37:30	70.2	83.1	73.7	60.2
25/06/2017 19:42:30	74	94.3	72.7	58.2
25/06/2017 19:47:30	67.2	77.1	71	59.2
25/06/2017 19:52:30	67.7	77.8	71.1	61
25/06/2017 19:57:30	68.3	84.1	71.6	60.5
25/06/2017 20:02:30	67.6	76.8	71.2	60.2
25/06/2017 20:07:30	66	76.6	70.2	58.1
25/06/2017 20:12:30	68.8	82.3	71.9	58.8
25/06/2017 20:17:30	74	93.9	71.5	58.5
25/06/2017 20:22:30	67.9	82.2	70.8	59.2
25/06/2017 20:27:30	68.6	82.2	71.7	59.5
25/06/2017 20:32:30	67.5	79.1	71	59.3
25/06/2017 20:37:30	66.2	80.7	69.8	57.9
25/06/2017 20:42:30	67.1	77.4	70.9	57.6
25/06/2017 20:47:30	65.3	77.5	69.2	55.5
25/06/2017 20:52:30	67.7	84.7	71.3	57.4
25/06/2017 20:57:30	65.5	76.8	69.6	57
25/06/2017 21:02:30	81.3	103	78.7	59.7
25/06/2017 21:07:30	67.2	78.5	70.5	59.7
25/06/2017 21:12:30	68.2	88.2	70	58.4
25/06/2017 21:17:30	66.9	81.6	70.7	59
25/06/2017 21:22:30	78.6	101.3	74	57.5
25/06/2017 21:27:30	67.7	79.6	71.6	58.4

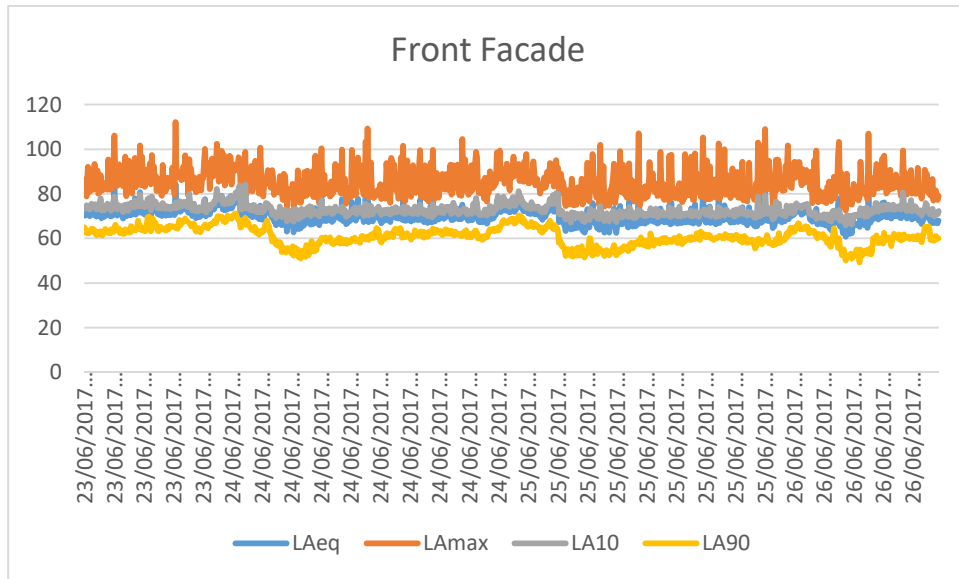
25/06/2017 21:32:30	69	91.8	71	58.7
25/06/2017 21:37:30	84.2	108.9	79.3	59.2
25/06/2017 21:42:30	68.5	83.2	71.5	59.6
25/06/2017 21:47:30	69.5	86.5	72.5	61.5
25/06/2017 21:52:30	67.8	82.1	71	59.8
25/06/2017 21:57:30	70.2	94.7	71.3	57.9
25/06/2017 22:02:30	69.8	87.5	72.8	58.4
25/06/2017 22:07:30	71.6	88.3	73.8	57.8
25/06/2017 22:12:30	69.1	86.2	71.9	58
25/06/2017 22:17:30	64.6	74.8	68.5	57
25/06/2017 22:22:30	65.1	77.2	68.8	57.4
25/06/2017 22:27:30	66.3	78.8	70.3	57.2
25/06/2017 22:32:30	75.9	95.2	76.5	59.6
25/06/2017 22:37:30	67.7	81.7	70.9	57.7
25/06/2017 22:42:30	69.3	95.3	71.4	58.4
25/06/2017 22:47:30	73.6	93.4	75.6	62.3
25/06/2017 22:52:30	68.6	85.7	71.6	58.1
25/06/2017 22:57:30	68.3	85.5	71.1	58.7
<b>Average</b>	72.5	84.9	71.8	58.9
<b>Maximum</b>	84.2	108.9	79.3	62.3
<b>Minimum</b>	64.6	74.8	68.5	55.5
<b>Night</b>				
25/06/2017 23:02:30	67.2	83	70.5	59.1
25/06/2017 23:07:30	68.2	81.3	71.9	59.1
25/06/2017 23:12:30	68	81.5	71.7	59.1
25/06/2017 23:17:30	67.6	81.6	71	60.1
25/06/2017 23:22:30	69	92.5	69.9	59.7
25/06/2017 23:27:30	71.3	87.6	74.7	62.2
25/06/2017 23:32:30	74.1	101.7	73.5	62.8
25/06/2017 23:37:30	68.6	85.4	71.5	61.5
25/06/2017 23:42:30	72.2	91.9	73.1	63.5
25/06/2017 23:47:30	71.4	82.8	74.6	64.8
25/06/2017 23:52:30	70	82.6	72.4	64.8
25/06/2017 23:57:30	70.2	92	71.1	62.9
26/06/2017 00:02:30	74.5	92.8	73.1	64.4
26/06/2017 00:07:30	71	94.3	72	63
26/06/2017 00:12:30	71.6	87.1	74.2	64.7
26/06/2017 00:17:30	72.9	87.6	75.7	65.5
26/06/2017 00:22:30	74.2	94	75.2	65.5
26/06/2017 00:27:30	72.8	88.6	74.8	66.8
26/06/2017 00:32:30	72.9	94.2	74.3	66.1
26/06/2017 00:37:30	71.9	87.8	74.2	64
26/06/2017 00:42:30	70.6	83.8	73.5	64.4
26/06/2017 00:47:30	72.2	91.1	74.7	64.6
26/06/2017 00:52:30	71.3	86.3	74.1	64.2
26/06/2017 00:57:30	72	84.9	75.1	65
26/06/2017 01:02:30	72.9	90.1	74.9	65.5
26/06/2017 01:07:30	72.4	90.6	75.2	64.3

26/06/2017 01:12:30	72.4	87.8	75.4	65.2
26/06/2017 01:17:30	71.3	88.7	74.4	63.6
26/06/2017 01:22:30	70.7	89.3	71.1	62.3
26/06/2017 01:27:30	68.4	81.8	70.9	63.6
26/06/2017 01:32:30	70.8	89.9	71.6	62.9
26/06/2017 01:37:30	67.5	75.9	70.4	62.7
26/06/2017 01:42:30	68.7	80	71	63.4
26/06/2017 01:47:30	71.7	95	71.4	63.1
26/06/2017 01:52:30	68.2	80.1	71.5	62.3
26/06/2017 01:57:30	73.2	99.4	68.6	60.9
26/06/2017 02:02:30	66.4	83	69	60.1
26/06/2017 02:07:30	66.5	76.3	69.6	62
26/06/2017 02:12:30	67.1	81.4	70.2	61.8
26/06/2017 02:17:30	67.2	79.4	70.2	61.4
26/06/2017 02:22:30	67.1	79.9	70.2	60.9
26/06/2017 02:27:30	66.4	79	69.1	60.5
26/06/2017 02:32:30	67.2	76.6	70.4	61.9
26/06/2017 02:37:30	67.7	80.7	70.8	61.3
26/06/2017 02:42:30	66	77.5	69.3	59.6
26/06/2017 02:47:30	66.1	75.8	69.1	60.2
26/06/2017 02:52:30	67.9	82.8	70.6	58.1
26/06/2017 02:57:30	65.4	82.6	68.3	58.5
26/06/2017 03:02:30	68.7	85.5	70.7	59.3
26/06/2017 03:07:30	64.2	77.7	67.8	56.5
26/06/2017 03:12:30	63.7	76.7	67.5	56.3
26/06/2017 03:17:30	67.5	81.8	70.9	58.6
26/06/2017 03:22:30	68.7	80.9	72.3	61.1
26/06/2017 03:27:30	70	87.6	72.4	64.5
26/06/2017 03:32:30	68.1	78	71.2	62
26/06/2017 03:37:30	66.9	83	69.4	59.4
26/06/2017 03:42:30	67.7	82.7	70.9	59.7
26/06/2017 03:47:30	75.4	97.7	71	55.7
26/06/2017 03:52:30	78	103.2	72.7	60
26/06/2017 03:57:30	65.3	81	67.9	55.7
26/06/2017 04:02:30	68.6	89.5	70.3	55.2
26/06/2017 04:07:30	66.3	83.8	69.1	52.5
26/06/2017 04:12:30	62.4	74	67.9	52.7
26/06/2017 04:17:30	65.4	81.8	69.3	55.1
26/06/2017 04:22:30	64	78.3	67.5	51.8
26/06/2017 04:27:30	60.8	72.5	66	50.2
26/06/2017 04:32:30	68.1	89.1	70.2	51.8
26/06/2017 04:37:30	62.7	76.7	67	52.1
26/06/2017 04:42:30	65.3	79.6	70.2	52.1
26/06/2017 04:47:30	62.1	75.5	66.9	51.9
26/06/2017 04:52:30	64.9	77	69.9	53.2
26/06/2017 04:57:30	62.3	75.2	66.4	51
26/06/2017 05:02:30	66.3	81.8	69.9	51.4
26/06/2017 05:07:30	67.2	84.5	70.5	52.4

26/06/2017 05:12:30	66.3	81.8	69.6	52.6
26/06/2017 05:17:30	65.9	77.9	70.4	53.6
26/06/2017 05:22:30	66.4	81.2	70.4	55
26/06/2017 05:27:30	66.1	80.3	70.7	52.1
26/06/2017 05:32:30	65.8	77	70.7	53.1
26/06/2017 05:37:30	65.2	78.1	70.3	49.3
26/06/2017 05:42:30	72.4	94.3	73.6	55.1
26/06/2017 05:47:30	68.4	83.7	71.3	52.2
26/06/2017 05:52:30	67.1	80.7	71.9	53.5
26/06/2017 05:57:30	68.5	80	73.2	53.2
26/06/2017 06:02:30	66	81.5	69.6	54.3
26/06/2017 06:07:30	67.2	81.3	71.6	53.4
26/06/2017 06:12:30	69.6	82.8	73.8	54.6
26/06/2017 06:17:30	64.8	77.4	69.8	53.3
26/06/2017 06:22:30	81	107	73	55
26/06/2017 06:27:30	66.9	81.6	70.6	53.1
26/06/2017 06:32:30	67.1	83.8	70.9	55.5
26/06/2017 06:37:30	68.9	84.7	72.4	52.9
26/06/2017 06:42:30	68.5	87	71.7	55.4
26/06/2017 06:47:30	69.9	79.9	73.1	60.1
26/06/2017 06:52:30	68.9	83.4	71.9	59.7
26/06/2017 06:57:30	73.9	88	75.9	59
<b>Average</b>	70.3	84.3	71.3	58.8
<b>Maximum</b>	81	107	75.9	66.8
<b>Minimum</b>	60.8	72.5	66	49.3
<b>Day</b>				
26/06/2017 07:02:30	75.2	93.4	75.9	61.4
26/06/2017 07:07:30	71.6	92.4	72.3	58.1
26/06/2017 07:12:30	68.5	82.5	71.9	59.5
26/06/2017 07:17:30	70.6	84.8	74	58
26/06/2017 07:22:30	70.2	84	73.8	58.7
26/06/2017 07:27:30	69.4	82.9	73.1	58.2
26/06/2017 07:32:30	75.8	95.7	74.9	60.4
26/06/2017 07:37:30	70.9	90.2	72.7	57.7
26/06/2017 07:42:30	76.1	97.1	74.8	62.5
26/06/2017 07:47:30	71.9	89	74.7	59.1
26/06/2017 07:52:30	69.5	80.2	73.3	60
26/06/2017 07:57:30	69.5	80.7	73	59.9
26/06/2017 08:02:30	70.7	81.5	75.1	60.4
26/06/2017 08:07:30	69.8	83.2	73.5	60.2
26/06/2017 08:12:30	73.1	90.7	74.7	59.4
26/06/2017 08:17:30	68.9	82.2	73.1	56.6
26/06/2017 08:22:30	70.5	84.6	73.6	59.4
26/06/2017 08:27:30	71	82.4	75.1	60.8
26/06/2017 08:32:30	69.9	87.5	72.8	62.1
26/06/2017 08:37:30	71.1	87.4	73.8	60.6
26/06/2017 08:42:30	71.9	88.6	73.8	60.7
26/06/2017 08:47:30	70	83	73.2	60.9



26/06/2017 08:52:30	71.1	86.8	74.4	59.9
26/06/2017 08:57:30	70.2	83.4	74.2	61.8
26/06/2017 09:02:30	69.3	81.5	73.5	60.3
26/06/2017 09:07:30	69.1	79	73	59
26/06/2017 09:12:30	70.8	88	73.6	59.3
26/06/2017 09:17:30	80.8	99.3	80.5	61.1
26/06/2017 09:22:30	70.4	85.8	73.5	61.8
26/06/2017 09:27:30	71.9	89.5	73.9	60
26/06/2017 09:32:30	70.5	82.2	73.5	60.5
26/06/2017 09:37:30	69	79.7	72.3	60.7
26/06/2017 09:42:30	71.7	85.7	74.5	60.6
26/06/2017 09:47:30	69.6	82.5	73.1	60.8
26/06/2017 09:52:30	71	87.2	74.1	59.7
26/06/2017 09:57:30	74.4	90.6	77.1	60.3
26/06/2017 10:02:30	68.5	80.2	72.1	60
26/06/2017 10:07:30	70.6	83.7	74.4	60.9
26/06/2017 10:12:30	70	81.9	73.7	59.7
26/06/2017 10:17:30	70.4	83.5	74.4	60.1
26/06/2017 10:22:30	69.1	80	73	60.4
26/06/2017 10:27:30	69.8	81.3	73.4	59.6
26/06/2017 10:32:30	71.1	91.6	71.8	61.3
26/06/2017 10:37:30	68.1	80.2	71.7	60.7
26/06/2017 10:42:30	68.1	81.8	71.9	60
26/06/2017 10:47:30	69	81.9	72.5	59.6
26/06/2017 10:52:30	66.5	77.9	70.2	58.4
26/06/2017 10:57:30	68.2	83	71.6	61.7
26/06/2017 11:02:30	69	81.4	72.5	62.4
26/06/2017 11:07:30	72.5	90.7	72.8	65.1
26/06/2017 11:12:30	72.2	85.4	75.8	65.2
26/06/2017 11:17:30	71.5	89.1	75.3	64.9
26/06/2017 11:22:30	69.5	85.3	72.4	65
26/06/2017 11:27:30	69.6	80.3	72.7	65.3
26/06/2017 11:32:30	68.6	84.4	70.9	63.5
26/06/2017 11:37:30	68	79.3	72.5	59.3
26/06/2017 11:42:30	67.1	81	70.8	59.4
26/06/2017 11:47:30	70.8	86.6	73.2	59.4
26/06/2017 11:52:30	66.9	77	70.8	59.2
26/06/2017 11:57:30	67	79.9	69.9	59
26/06/2017 12:02:30	67.9	81.6	70.8	61
26/06/2017 12:07:30	68.1	79.8	71.5	60.4
26/06/2017 12:12:30	66.8	77.2	70.8	59.7
26/06/2017 12:17:30	68	79	72.2	60
<b>Average</b>	71.3	84.5	73.3	60.5
<b>Maximum</b>	80.8	99.3	80.5	65.3
<b>Minimum</b>	66.5	77	69.9	56.6



### Rear Elevation

**Thurs 6th July to Mon 10th**

Date & time	LAeq	LAmax	LA10	LA90
06/07/2017 15:48:32	64.2	79.5	64.6	62
06/07/2017 15:53:32	78.4	83.7	82.6	51.7
06/07/2017 15:58:32	62.7	76.1	65	51.3
06/07/2017 16:03:32	62.5	71.7	63.2	61.3
06/07/2017 16:08:32	62.8	70.1	63.8	61.5
06/07/2017 16:13:32	62.4	68.4	63.5	61.3
06/07/2017 16:18:32	61.7	83.1	63.7	52.3
06/07/2017 16:23:32	62.4	66.5	63.4	61.3
06/07/2017 16:28:32	62.3	69.9	62.9	61.3
06/07/2017 16:33:32	62.8	70.4	63.7	61.9
06/07/2017 16:38:32	62.9	83	63.3	61.3
06/07/2017 16:43:32	62.5	66.4	63.6	61.4
06/07/2017 16:48:32	62.2	74	62.9	61.2
06/07/2017 16:53:32	62.7	69.4	63.7	61.4
06/07/2017 16:58:32	62.6	68.4	63.6	61.4
06/07/2017 17:03:32	62.3	65.6	63.1	61.2
06/07/2017 17:08:32	62.5	67.3	63.5	61.3
06/07/2017 17:13:32	62	64.2	62.8	61.1
06/07/2017 17:18:32	62.3	66.1	63.2	61.2
06/07/2017 17:23:32	62.2	71.4	63.1	61.1
06/07/2017 17:28:32	61.2	65.6	63.1	55.9
06/07/2017 17:33:32	52.9	63.4	56.5	47.7
06/07/2017 17:38:32	54.8	62	57.9	48.8
06/07/2017 17:43:32	49.4	58.3	52	46.3
06/07/2017 17:48:32	50	64.6	51.8	47.1
06/07/2017 17:53:32	49.1	61.6	50.6	46.7
06/07/2017 17:58:32	55	63.5	61.6	47.1
06/07/2017 18:03:32	62.1	69.9	62.8	61.1
06/07/2017 18:08:32	61.9	64.7	62.8	61.1

06/07/2017 18:13:32	63.2	74.8	63.6	61.2
06/07/2017 18:18:32	62.4	69.7	63	61.3
06/07/2017 18:23:32	62.1	64.2	62.9	61.2
06/07/2017 18:28:32	62.1	65.5	62.9	61.2
06/07/2017 18:33:32	62.5	64.6	63.6	61.3
06/07/2017 18:38:32	62.3	65	62.9	61.2
06/07/2017 18:43:32	62.1	66.1	62.9	61.1
06/07/2017 18:48:32	62.7	71.5	63.7	61.5
06/07/2017 18:53:32	62.3	66.7	62.9	61.3
06/07/2017 18:58:32	62.7	76.7	63.6	61.3
<b>Average</b>	65.1	69.1	62.6	58.3
<b>Maximum</b>	78.4	83.7	82.6	62
<b>Minimum</b>	49.1	58.3	50.6	46.3
<b>Evening</b>				
06/07/2017 19:03:32	65.7	88.9	63.3	61.4
06/07/2017 19:08:32	62.7	79	63.4	61.5
06/07/2017 19:13:32	62.4	73.4	63.3	61.3
06/07/2017 19:18:32	62.3	64.9	62.9	61.3
06/07/2017 19:23:32	61.2	72.6	63	49.9
06/07/2017 19:28:32	62.4	66.4	63.5	61.2
06/07/2017 19:33:32	62	66.2	62.8	61.1
06/07/2017 19:38:32	62.2	64.4	63.1	61.2
06/07/2017 19:43:32	62.1	73.5	62.8	61.1
06/07/2017 19:48:32	60.4	79.6	62.8	47
06/07/2017 19:53:32	62	66.3	62.8	61.1
06/07/2017 19:58:32	62	69.4	62.8	61.1
06/07/2017 20:03:32	61.9	63.9	62.8	61.1
06/07/2017 20:08:32	62	66	62.9	61.1
06/07/2017 20:13:32	59.9	66.5	62.8	45.7
06/07/2017 20:18:32	61.9	64.5	62.8	61.1
06/07/2017 20:23:32	62	65.4	62.8	61.1
06/07/2017 20:28:32	62	69.9	62.8	61.1
06/07/2017 20:33:32	60	65	62.8	45.9
06/07/2017 20:38:32	62	66.1	62.8	61.1
06/07/2017 20:43:32	61.9	63	62.7	61.1
06/07/2017 20:48:32	61.9	64.3	62.7	61.1
06/07/2017 20:53:32	59.9	65.2	62.8	45.2
06/07/2017 20:58:32	62	67.8	62.8	61.1
06/07/2017 21:03:32	61.9	63.9	62.7	61.1
06/07/2017 21:08:32	62	63.3	62.8	61.2
06/07/2017 21:13:32	62.5	68.3	63.5	61.2
06/07/2017 21:18:32	59.6	63.3	62.6	44.5
06/07/2017 21:23:32	61.9	63.4	62.7	61.1
06/07/2017 21:28:32	62	65.7	62.8	61.1
06/07/2017 21:33:32	61.9	64.9	62.7	61.1
06/07/2017 21:38:32	54.7	64.7	62.1	44.4
06/07/2017 21:43:32	46.7	62.8	47.8	44.5
06/07/2017 21:48:32	50.8	68.8	52.6	45.7

06/07/2017 21:53:32	47.6	57.2	49.7	44.9
06/07/2017 21:58:32	47.7	68.3	49.2	44.7
06/07/2017 22:03:32	47.7	65.4	48.9	45.3
06/07/2017 22:08:32	60	68.2	62.7	45.3
06/07/2017 22:13:32	62	64.6	62.8	61.1
06/07/2017 22:18:32	62	63.1	62.8	61.2
06/07/2017 22:23:32	62.1	64.4	62.8	61.2
06/07/2017 22:28:32	62.3	65.4	62.9	61.3
06/07/2017 22:33:32	62.5	67.3	63.3	61.6
06/07/2017 22:38:32	62.2	63.3	62.8	61.2
06/07/2017 22:43:32	62.2	63.1	62.8	61.3
06/07/2017 22:48:32	62.2	72.1	62.8	61.2
06/07/2017 22:53:32	62.1	70	62.8	61.2
06/07/2017 22:58:32	61.9	63.2	62.7	61.1
<b>Average</b>	61.4	67	61.5	57
<b>Maximum</b>	65.7	88.9	63.5	61.6
<b>Minimum</b>	46.7	57.2	47.8	44.4
<b>Night</b>				
06/07/2017 23:03:32	61.8	64.4	62.7	61.1
06/07/2017 23:08:32	61.9	65.8	62.7	61.1
06/07/2017 23:13:32	61.9	63.2	62.7	61.1
06/07/2017 23:18:32	62	65.3	62.8	61.1
06/07/2017 23:23:32	61.9	65.1	62.8	61.1
06/07/2017 23:28:32	61.9	75.1	62.7	61.1
06/07/2017 23:33:32	61.9	68.1	62.7	61.1
06/07/2017 23:38:32	61.8	67.1	62.7	61.1
06/07/2017 23:43:32	61.8	63	62.7	61.1
06/07/2017 23:48:32	61.8	62.8	62.7	61.1
06/07/2017 23:53:32	61.7	63.3	62.6	61
06/07/2017 23:58:32	61.7	64.5	62.6	61
07/07/2017 00:03:32	61.9	69.2	62.8	61.1
07/07/2017 00:08:32	61.8	64.6	62.7	61.1
07/07/2017 00:13:32	61.8	67.8	62.6	61
07/07/2017 00:18:32	61.8	68.5	62.7	61.1
07/07/2017 00:23:32	61.8	70.5	62.7	61.1
07/07/2017 00:28:32	61.7	63.5	62.6	61
07/07/2017 00:33:32	61.7	63.1	62.6	61
07/07/2017 00:38:32	61.7	63.5	62.6	61
07/07/2017 00:43:32	61.9	76.7	62.7	61.1
07/07/2017 00:48:32	62.3	66.5	62.9	61.3
07/07/2017 00:53:32	60	65.1	63.1	43.5
07/07/2017 00:58:32	62.1	63.4	62.8	61.2
07/07/2017 01:03:32	61.1	65	62.8	44.8
07/07/2017 01:08:32	60.6	63.4	62.7	43.8
07/07/2017 01:13:32	59.9	64.8	62.8	44.1
07/07/2017 01:18:32	62	63.9	62.9	61.1
07/07/2017 01:23:32	59.7	65.5	62.9	43
07/07/2017 01:28:32	61	65.5	62.9	46.4

07/07/2017 01:33:32	60.9	63.4	62.7	43.5
07/07/2017 01:38:32	59.3	64.6	62.7	43.4
07/07/2017 01:43:32	61.2	69.2	62.9	43.6
07/07/2017 01:48:32	45.6	61.1	46.8	42
07/07/2017 01:53:32	44.2	55.1	45.5	42.1
07/07/2017 01:58:32	43.9	54	45.5	41.9
07/07/2017 02:03:32	43.5	51.3	44.8	42
07/07/2017 02:08:32	44.5	56.7	46.1	42.1
07/07/2017 02:13:32	51	64.6	46.1	42.3
07/07/2017 02:18:32	62.5	64.9	63.4	61.5
07/07/2017 02:23:32	62.4	63.7	63.1	61.5
07/07/2017 02:28:32	59.8	65.3	62.9	42.2
07/07/2017 02:33:32	61.9	64.6	62.9	61.1
07/07/2017 02:38:32	59.5	69.3	62.6	41.7
07/07/2017 02:43:32	59.2	65.8	62.7	41.5
07/07/2017 02:48:32	61.2	65.3	63	42.8
07/07/2017 02:53:32	61.1	63.8	63	43.7
07/07/2017 02:58:32	59.5	66	63.4	41
07/07/2017 03:03:32	60.1	66	63.5	41.2
07/07/2017 03:08:32	62	65.6	63.6	42.8
07/07/2017 03:13:32	59.8	64.2	63.2	42.2
07/07/2017 03:18:32	59.1	65.1	63.2	42.6
07/07/2017 03:23:32	61.4	66	63.7	41.2
07/07/2017 03:28:32	61	65	63.3	41.9
07/07/2017 03:33:32	58.9	65	63.3	40.7
07/07/2017 03:38:32	60.5	68.3	63.7	42.2
07/07/2017 03:43:32	61.7	65.7	63.6	44.5
07/07/2017 03:48:32	59.6	64.2	63.4	41.7
07/07/2017 03:53:32	58.9	66.5	63.4	41.2
07/07/2017 03:58:32	61.5	66.6	63.7	43.7
07/07/2017 04:03:32	60.9	67	63.4	43.2
07/07/2017 04:08:32	58.8	66.2	63.4	41.9
07/07/2017 04:13:32	60.5	78.2	63.5	42.3
07/07/2017 04:18:32	61.7	65.7	63.6	44.1
07/07/2017 04:23:32	59.4	76.2	63.4	40.3
07/07/2017 04:28:32	58.9	66.2	63.4	41.8
07/07/2017 04:33:32	61.7	66.2	63.7	40
07/07/2017 04:38:32	60.6	64.7	63.6	40.9
07/07/2017 04:43:32	58.6	66.1	63.6	39.7
07/07/2017 04:48:32	60.7	66.1	63.7	39.8
07/07/2017 04:53:32	61.6	65.7	63.7	41.4
07/07/2017 04:58:32	58	66	62.9	40.2
07/07/2017 05:03:32	59.2	66.3	63.4	40.1
07/07/2017 05:08:32	61.6	66.3	63.7	40.9
07/07/2017 05:13:32	59.6	64.4	63.1	41.3
07/07/2017 05:18:32	58.1	65.9	63.1	39.7
07/07/2017 05:23:32	61	65.6	63.6	41.4
07/07/2017 05:28:32	60.9	64.2	63.4	43.1

07/07/2017 05:33:32	58	65.8	63	40.2
07/07/2017 05:38:32	59.7	66	62.9	41.1
07/07/2017 05:43:32	61.3	66.3	63.2	41.7
07/07/2017 05:48:32	58.4	64	62.8	39.6
07/07/2017 05:53:32	56.6	65.9	62.8	40.9
07/07/2017 05:58:32	47.4	65.6	46.9	40.6
07/07/2017 06:03:32	45.4	58.5	47.3	41
07/07/2017 06:08:32	44.7	59.5	46.1	40.7
07/07/2017 06:13:32	43.2	49.5	45.2	41
07/07/2017 06:18:32	43.3	52.3	44.8	41.1
07/07/2017 06:23:32	60.8	64.2	63.3	41.9
07/07/2017 06:28:32	62.1	65.1	63.3	61
07/07/2017 06:33:32	60.2	63.8	62.9	43.2
07/07/2017 06:38:32	59.3	65.7	63.1	42.8
07/07/2017 06:43:32	60	66.2	62.9	43.3
07/07/2017 06:48:32	61.2	65.6	62.9	44.4
07/07/2017 06:53:32	58.6	63.5	62.6	43.1
07/07/2017 06:58:32	58.2	66.3	62.8	44
<b>Average</b>	60.3	65	61.1	47.6
<b>Maximum</b>	62.5	78.2	63.7	61.5
<b>Minimum</b>	43.2	49.5	44.8	39.6
<b>Day</b>				
07/07/2017 07:03:32	61.1	65.8	63.3	44.9
07/07/2017 07:08:32	60.1	67	62.8	45.1
07/07/2017 07:13:32	58.4	70.1	62.9	43.6
07/07/2017 07:18:32	60.1	65.6	63	43.2
07/07/2017 07:23:32	61.2	69.3	63.1	44.5
07/07/2017 07:28:32	57.7	63.8	62.6	45.2
07/07/2017 07:33:32	58.9	69.9	62.8	46.5
07/07/2017 07:38:32	61.2	72.2	63.1	45.9
07/07/2017 07:43:32	59	64.5	62.6	45.1
07/07/2017 07:48:32	58.4	69.5	63	47.2
07/07/2017 07:53:32	61	65.4	63.2	46.4
07/07/2017 07:58:32	61.5	69	63.3	47.8
07/07/2017 08:03:32	58.2	66.1	63	49.2
07/07/2017 08:08:32	61	83.2	63.5	48.9
07/07/2017 08:13:32	62.2	84	63.7	49.2
07/07/2017 08:18:32	59.2	64.4	62.9	50.4
07/07/2017 08:23:32	59.8	66.6	63.7	51.4
07/07/2017 08:28:32	61.6	66.6	63.7	49.8
07/07/2017 08:33:32	60	67.9	62.9	51.2
07/07/2017 08:38:32	60.4	69.6	64.2	54.4
07/07/2017 08:43:32	62.1	68.1	64.4	53.6
07/07/2017 08:48:32	60.8	67.5	63.4	51.7
07/07/2017 08:53:32	59.1	67.2	63.7	51.2
07/07/2017 08:58:32	61	73.3	63.8	50.8
07/07/2017 09:03:32	62.2	69.8	65.1	51.2
07/07/2017 09:08:32	59.2	71.7	63.2	52.6

07/07/2017 09:13:32	59.6	73.4	63.4	49.6
07/07/2017 09:18:32	62.6	69.3	64.8	52.6
07/07/2017 09:23:32	60.1	70.6	63	51.4
07/07/2017 09:28:32	59.1	68.2	63.3	50.4
07/07/2017 09:33:32	61.4	71.2	63.6	50.3
07/07/2017 09:38:32	60.9	68.3	63.3	51.1
07/07/2017 09:43:32	59.6	69.5	63.4	51.7
07/07/2017 09:48:32	60.2	69.1	63.2	50.1
07/07/2017 09:53:32	62.1	68.8	63.9	51.9
07/07/2017 09:58:32	55.8	74.7	58.8	49.8
07/07/2017 10:03:32	58.2	85.9	54.3	48.7
07/07/2017 10:08:32	52	64.3	53.8	49
07/07/2017 10:13:32	58.9	70.3	63.1	50.4
07/07/2017 10:18:32	54.3	73.4	56.9	48.7
07/07/2017 10:23:32	55.5	69.9	58.3	48.8
07/07/2017 10:28:32	58.9	68	62.9	47.9
07/07/2017 10:33:32	62.7	72.8	63.7	61.3
07/07/2017 10:38:32	60.6	70.4	62.9	47.9
07/07/2017 10:43:32	61.9	69	63.5	49.7
07/07/2017 10:48:32	59.8	70.2	62.8	46.9
07/07/2017 10:53:32	59.3	69.3	62.8	46.9
07/07/2017 10:58:32	61.4	65.4	63.6	53.4
07/07/2017 11:03:32	61.3	79.1	62.8	49.1
07/07/2017 11:08:32	60.6	84.1	63	50.5
07/07/2017 11:13:32	59.4	68.5	63.1	49.1
07/07/2017 11:18:32	62	67	63.7	55.9
07/07/2017 11:23:32	60.7	67.6	63.2	50.9
07/07/2017 11:28:32	60.9	70.5	63.8	50.6
07/07/2017 11:33:32	61.5	69.9	64.4	50.5
07/07/2017 11:38:32	62.2	69.9	63.8	52.1
07/07/2017 11:43:32	59.6	68.4	62.9	51
07/07/2017 11:48:32	59.4	65.5	62.9	51.3
07/07/2017 11:53:32	62.7	69	63.9	56.9
07/07/2017 11:58:32	61.7	70.3	63.7	51.8
07/07/2017 12:03:32	61.9	83.9	63.5	53.2
07/07/2017 12:08:32	64	78.3	64.4	52.7
07/07/2017 12:13:32	62.7	77.2	64.1	58.1
07/07/2017 12:18:32	60.9	65.7	63.5	56.4
07/07/2017 12:23:32	59.6	64.8	63.2	50.7
07/07/2017 12:28:32	61.8	66.3	63.7	50.5
07/07/2017 12:33:32	60.7	68.9	62.9	50.1
07/07/2017 12:38:32	58.9	69.2	62.7	49
07/07/2017 12:43:32	60.8	66.7	63.4	50.4
07/07/2017 12:48:32	62	65.1	63.5	57.8
07/07/2017 12:53:32	59.8	64.2	62.9	49.6
07/07/2017 12:58:32	59.8	64.9	62.9	49.6
07/07/2017 13:03:32	62	82.4	63.6	51.2
07/07/2017 13:08:32	60.9	63.5	62.8	51.3

07/07/2017 13:13:32	58.9	64.8	62.7	49.4
07/07/2017 13:18:32	61.4	84.8	63.5	50.9
07/07/2017 13:23:32	61.9	70	63.8	51.7
07/07/2017 13:28:32	60	64	63.2	52
07/07/2017 13:33:32	59.1	67.4	63.4	50.2
07/07/2017 13:38:32	61.4	67.2	63.6	50.3
07/07/2017 13:43:32	62	73.5	63.5	53.3
07/07/2017 13:48:32	58.7	65.6	62.9	48.8
07/07/2017 13:53:32	60	65.2	63.2	48.1
07/07/2017 13:58:32	61.3	65.5	63.1	49.8
07/07/2017 14:03:32	59.6	84.9	62.6	49.1
07/07/2017 14:08:32	50	60.5	52.3	46.8
07/07/2017 14:13:32	52.6	70.6	55.2	48.2
07/07/2017 14:18:32	52.5	59.1	56.5	46.2
07/07/2017 14:23:32	52.8	73.6	54.2	48.1
07/07/2017 14:28:32	58.2	82.2	55.6	46.4
07/07/2017 14:33:32	52	69	53.2	46.5
07/07/2017 14:38:32	62.6	66.9	63.6	61.4
07/07/2017 14:43:32	62.2	74.2	62.8	61.1
07/07/2017 14:48:32	60.3	71	62.9	49.3
07/07/2017 14:53:32	61.9	64.3	63	61
07/07/2017 14:58:32	59.9	65.7	62.7	49.2
07/07/2017 15:03:32	60	73	63.1	49.4
07/07/2017 15:08:32	62	76.7	63.5	54.6
07/07/2017 15:13:32	60.6	70.2	62.8	46.6
07/07/2017 15:18:32	59.7	65.3	62.7	50.5
07/07/2017 15:23:32	61.1	66.8	63.7	48.7
07/07/2017 15:28:32	62.1	65.9	63.7	51.5
07/07/2017 15:33:32	59.6	65.3	63	52
07/07/2017 15:38:32	59.7	65.3	63.2	49.4
07/07/2017 15:43:32	61.8	77.2	63.4	50.7
07/07/2017 15:48:32	60.9	74.2	62.8	50.7
07/07/2017 15:53:32	60.1	70.6	62.9	47.8
07/07/2017 15:58:32	59.9	65.2	62.7	47.3
07/07/2017 16:03:32	61.6	65	62.9	49.4
07/07/2017 16:08:32	60.1	64.4	63.2	47.4
07/07/2017 16:13:32	60.1	68.3	63	50.4
07/07/2017 16:18:32	61.8	66.4	63.5	48.3
07/07/2017 16:23:32	60.5	63.7	62.8	48.6
07/07/2017 16:28:32	60.1	66.7	62.9	50.8
07/07/2017 16:33:32	61.2	66.7	63.2	53.1
07/07/2017 16:38:32	61.9	73.3	63.6	51
07/07/2017 16:43:32	60.7	80.9	63.4	47.7
07/07/2017 16:48:32	60.2	65.1	62.9	47.3
07/07/2017 16:53:32	61.8	64.7	62.8	61
07/07/2017 16:58:32	60.2	65.8	63.1	50
07/07/2017 17:03:32	59.9	64.7	62.7	52
07/07/2017 17:08:32	62.3	66	63.5	61.1



07/07/2017 17:13:32	60.3	67.7	62.9	48.4
07/07/2017 17:18:32	61.3	66.6	62.9	51
07/07/2017 17:23:32	61	67	62.8	51.5
07/07/2017 17:28:32	60.1	65.2	62.9	50.9
07/07/2017 17:33:32	62.1	64.9	62.9	61.1
07/07/2017 17:38:32	59.9	65.3	62.9	49.3
07/07/2017 17:43:32	62.3	72.3	63	61.2
07/07/2017 17:48:32	59.6	67.6	62.8	47.9
07/07/2017 17:53:32	62	67.4	63.1	61
07/07/2017 17:58:32	59.9	63.6	62.7	47.8
07/07/2017 18:03:32	60.7	68	62.7	48.6
07/07/2017 18:08:32	61	63.7	62.7	46.6
07/07/2017 18:13:32	56.7	65	62.4	46.5
07/07/2017 18:18:32	51.7	71.8	51.4	47.1
07/07/2017 18:23:32	53.4	71	54.3	46.2
07/07/2017 18:28:32	53.3	73.9	55.5	48.6
07/07/2017 18:33:32	55	70.2	57.9	47.6
07/07/2017 18:38:32	52.4	75.9	52.1	46
07/07/2017 18:43:32	60.3	68.8	62.8	46.3
07/07/2017 18:48:32	62.1	65	62.9	61.2
07/07/2017 18:53:32	62.2	69.1	62.9	61.2
07/07/2017 18:58:32	62.3	66.5	62.9	61.2
<b>Average</b>	60.5	69.3	62.3	50.6
<b>Maximum</b>	64	85.9	65.1	61.4
<b>Minimum</b>	50	59.1	51.4	43.2
<b>Evening</b>				
07/07/2017 19:03:32	62.3	72.2	62.9	61.2
07/07/2017 19:08:32	60.1	70.7	62.9	47.2
07/07/2017 19:13:32	62.3	75.7	62.9	61.2
07/07/2017 19:18:32	59.9	66.4	62.8	49.1
07/07/2017 19:23:32	62.2	65.2	62.9	61.2
07/07/2017 19:28:32	60	64.4	63.1	47.4
07/07/2017 19:33:32	62.4	66.4	63.4	61.3
07/07/2017 19:38:32	60.5	74.6	62.9	46.7
07/07/2017 19:43:32	62.1	66	62.9	61.2
07/07/2017 19:48:32	59.6	65.3	62.7	47.9
07/07/2017 19:53:32	62.1	63.5	62.8	61.2
07/07/2017 19:58:32	59.9	79.3	62.7	48.1
07/07/2017 20:03:32	62.6	72.7	63.2	61.2
07/07/2017 20:08:32	59.8	65.5	62.8	50.1
07/07/2017 20:13:32	61.6	65.1	62.9	49.3
07/07/2017 20:18:32	60.7	63.9	62.8	49.1
07/07/2017 20:23:32	61	66.6	63.1	47.8
07/07/2017 20:28:32	61.8	79.7	63	50.8
07/07/2017 20:33:32	60.1	66.6	62.7	49.9
07/07/2017 20:38:32	62.2	70.9	62.9	61.1
07/07/2017 20:43:32	59.9	65.1	63	50.8
07/07/2017 20:48:32	62.5	65.9	63.2	61.6

07/07/2017 20:53:32	60.1	67.2	63.2	47.5
07/07/2017 20:58:32	62.4	65.2	63.2	61.4
07/07/2017 21:03:32	59.6	65.2	62.8	48.3
07/07/2017 21:08:32	62.3	65.6	62.9	61.3
07/07/2017 21:13:32	59.6	65.7	62.7	47.9
07/07/2017 21:18:32	61.9	68.5	62.9	52.5
07/07/2017 21:23:32	60.2	69.2	62.7	45.1
07/07/2017 21:28:32	61.4	68.8	62.9	48.5
07/07/2017 21:33:32	60.7	63.8	62.8	45.9
07/07/2017 21:38:32	60.7	67	63	51.8
07/07/2017 21:43:32	62.1	68.6	63.3	60.1
07/07/2017 21:48:32	59.6	66.9	62.7	44.7
07/07/2017 21:53:32	62	64.9	62.8	61.1
07/07/2017 21:58:32	59.9	66.1	62.9	51.4
07/07/2017 22:03:32	62.6	73.6	63	61.4
07/07/2017 22:08:32	60.7	71.4	63.6	49.2
07/07/2017 22:13:32	62.4	66.7	62.9	61.5
07/07/2017 22:18:32	57.3	65.5	63.3	48.1
07/07/2017 22:23:32	53.8	68.3	56.2	48.4
07/07/2017 22:28:32	48.9	63.6	50.4	45.4
07/07/2017 22:33:32	48.4	56.2	50.9	45.4
07/07/2017 22:38:32	48.3	59.3	50.2	45.8
07/07/2017 22:43:32	48.2	57.7	50.4	45.3
07/07/2017 22:48:32	54.2	64.1	61.1	45.2
07/07/2017 22:53:32	62.4	66	63.3	61.4
07/07/2017 22:58:32	62.3	64	62.9	61.3
<b>Average</b>	60.7	67.1	61.7	52.7
<b>Maximum</b>	62.6	79.7	63.6	61.6
<b>Minimum</b>	48.2	56.2	50.2	44.7
<b>Night</b>				
07/07/2017 23:03:32	62.3	64.4	62.9	61.4
07/07/2017 23:08:32	62.7	72.8	63.5	61.7
07/07/2017 23:13:32	62.8	72.7	63.9	61.3
07/07/2017 23:18:32	62.4	69.9	63.2	61.2
07/07/2017 23:23:32	61.9	64.2	62.8	61.1
07/07/2017 23:28:32	61.8	66.1	62.7	61.1
07/07/2017 23:33:32	62	71.8	62.7	61
07/07/2017 23:38:32	61.9	76.2	62.7	61.1
07/07/2017 23:43:32	61.8	69	62.7	61.1
07/07/2017 23:48:32	61.7	70.9	63.1	52.2
07/07/2017 23:53:32	61.3	66.1	62.8	49.8
07/07/2017 23:58:32	62.4	71.6	63	61.2
08/07/2017 00:03:32	62	65.4	62.8	61.1
08/07/2017 00:08:32	61.9	75.9	62.7	61.1
08/07/2017 00:13:32	61.7	62.9	62.6	61
08/07/2017 00:18:32	61.9	64.3	62.7	61.1
08/07/2017 00:23:32	61.9	63.1	62.7	61.1
08/07/2017 00:28:32	61.9	63.4	62.7	61.1

08/07/2017 00:33:32	62	67.2	62.8	61.1
08/07/2017 00:38:32	62.1	67.9	62.9	61.1
08/07/2017 00:43:32	59.7	63.3	62.6	45.4
08/07/2017 00:48:32	61.8	63.3	62.7	61
08/07/2017 00:53:32	61.8	65.2	62.7	61.1
08/07/2017 00:58:32	61.7	70	62.9	60.1
08/07/2017 01:03:32	60	63.6	62.6	46.1
08/07/2017 01:08:32	61.9	65.3	62.7	61.1
08/07/2017 01:13:32	61.8	65.3	62.7	61.1
08/07/2017 01:18:32	59.9	65.9	62.8	46
08/07/2017 01:23:32	61.9	67.9	62.8	61.1
08/07/2017 01:28:32	62	67.3	62.8	61.1
08/07/2017 01:33:32	61.5	64.9	62.9	46.5
08/07/2017 01:38:32	60.8	76.3	62.8	45.9
08/07/2017 01:43:32	62.5	70.7	63.5	61.2
08/07/2017 01:48:32	61.9	64.2	62.8	61.1
08/07/2017 01:53:32	61.8	65.5	62.7	61
08/07/2017 01:58:32	61.9	69.2	63	61
08/07/2017 02:03:32	59.8	66.1	63	43.9
08/07/2017 02:08:32	59.3	65.1	63	44.2
08/07/2017 02:13:32	61.8	69.6	63.4	46.9
08/07/2017 02:18:32	60.5	64.1	63	44.6
08/07/2017 02:23:32	59	65.7	63	44.1
08/07/2017 02:28:32	58	66	63.1	45.2
08/07/2017 02:33:32	53.3	69.1	53.9	47
08/07/2017 02:38:32	47.1	57.7	49.3	43.3
08/07/2017 02:43:32	48.3	73.4	48.4	43.7
08/07/2017 02:48:32	46.4	59.3	48.5	43.3
08/07/2017 02:53:32	48.9	63.3	50.9	44.1
08/07/2017 02:58:32	60.3	76	62.9	44.6
08/07/2017 03:03:32	62.4	78.9	62.9	61.2
08/07/2017 03:08:32	60.2	66.3	63.2	47
08/07/2017 03:13:32	62.5	67.1	63.9	61
08/07/2017 03:18:32	60	63.9	62.8	49.4
08/07/2017 03:23:32	59.4	66.6	63	47.4
08/07/2017 03:28:32	61.3	65.8	63.5	48.3
08/07/2017 03:33:32	61.4	64.9	63.5	48.4
08/07/2017 03:38:32	59.6	65.8	63.5	47.1
08/07/2017 03:43:32	60	71.9	63.3	46.3
08/07/2017 03:48:32	62.1	70.1	63.7	53
08/07/2017 03:53:32	59.1	67.7	62.8	46
08/07/2017 03:58:32	58.7	66.6	63	45.4
08/07/2017 04:03:32	61.5	74.7	63.3	46.6
08/07/2017 04:08:32	60.7	69.1	63.4	45.6
08/07/2017 04:13:32	58.9	67.3	63.3	44.9
08/07/2017 04:18:32	60.6	68.9	63.4	46.3
08/07/2017 04:23:32	61.6	70.2	63.6	49.1
08/07/2017 04:28:32	58.9	71.9	63.1	45.1

08/07/2017 04:33:32	59.5	66.8	63.4	45.6
08/07/2017 04:38:32	61.4	70.3	63.2	46.2
08/07/2017 04:43:32	59.3	69.2	62.8	45.1
08/07/2017 04:48:32	59.2	82.4	62.9	41.1
08/07/2017 04:53:32	61	65.4	63	41.3
08/07/2017 04:58:32	60.4	76.1	62.8	40.9
08/07/2017 05:03:32	58	65.3	63	41.5
08/07/2017 05:08:32	60.3	74.3	63.4	40.6
08/07/2017 05:13:32	61.3	65.8	63.3	41.6
08/07/2017 05:18:32	57.8	64	62.7	40.1
08/07/2017 05:23:32	58.8	65.5	63	40.2
08/07/2017 05:28:32	61.4	66.3	63.5	40.5
08/07/2017 05:33:32	59.1	63.7	62.8	40.5
08/07/2017 05:38:32	57.7	65.3	63	40.2
08/07/2017 05:43:32	61	65.8	63.2	40.1
08/07/2017 05:48:32	60.2	63.8	62.9	40.6
08/07/2017 05:53:32	57.8	66.3	63.1	39.9
08/07/2017 05:58:32	60.2	65.4	63.3	39.1
08/07/2017 06:03:32	61.3	65.7	63.4	41.7
08/07/2017 06:08:32	57.2	65.4	62.6	39.8
08/07/2017 06:13:32	59	65.8	62.9	40.4
08/07/2017 06:18:32	61.1	65.3	63.3	41.8
08/07/2017 06:23:32	58.8	63.9	62.8	39.7
08/07/2017 06:28:32	58.4	67.6	63	41.3
08/07/2017 06:33:32	61.8	70.3	63.9	48.8
08/07/2017 06:38:32	53.3	67	58.1	41.8
08/07/2017 06:43:32	46.1	62.1	47.4	40
08/07/2017 06:48:32	43.7	56.6	45.8	40.3
08/07/2017 06:53:32	49	65.8	51.2	40.8
08/07/2017 06:58:32	44.3	53.9	46.4	40.5
<b>Average</b>	60.5	67.3	61.7	49.6
<b>Maximum</b>	62.8	82.4	63.9	61.7
<b>Minimum</b>	43.7	53.9	45.8	39.1
<b>Day</b>				
08/07/2017 07:03:32	55.8	64.2	62.6	40.5
08/07/2017 07:08:32	62.5	66.2	63.4	61.5
08/07/2017 07:13:32	59.6	66.5	63	41.2
08/07/2017 07:18:32	61.4	68	63.5	43.4
08/07/2017 07:23:32	60.9	63.9	63.1	42.8
08/07/2017 07:28:32	58.9	66.1	63.3	47.4
08/07/2017 07:33:32	59.9	66.3	63.3	48.2
08/07/2017 07:38:32	61.4	66.3	63.3	47.4
08/07/2017 07:43:32	59	63.9	62.9	43.9
08/07/2017 07:48:32	57.9	65.1	62.9	43.9
08/07/2017 07:53:32	62.3	83.8	63.6	47.5
08/07/2017 07:58:32	61.5	84.8	63.5	45.9
08/07/2017 08:03:32	57.9	65.4	63.1	45.4
08/07/2017 08:08:32	61.2	71.4	63.7	50.2

08/07/2017 08:13:32	62.2	67.8	64.9	49
08/07/2017 08:18:32	59.4	68.9	63.8	49.5
08/07/2017 08:23:32	60.3	65.5	63.5	46.9
08/07/2017 08:28:32	62	69.8	63.9	49.7
08/07/2017 08:33:32	61.1	74.4	64.4	50.8
08/07/2017 08:38:32	58.7	65.6	63.3	45.5
08/07/2017 08:43:32	61.7	74.6	63.7	46.6
08/07/2017 08:48:32	60.2	66.7	63.3	47.5
08/07/2017 08:53:32	61	84.7	63.1	46.2
08/07/2017 08:58:32	62.9	85.3	63.7	53.4
08/07/2017 09:03:32	61.9	85.6	63.5	49.9
08/07/2017 09:08:32	58	67.8	63	46.3
08/07/2017 09:13:32	61.1	77.9	63.6	46.8
08/07/2017 09:18:32	61.5	64.8	63.7	52
08/07/2017 09:23:32	58.7	69.7	63.1	51.5
08/07/2017 09:28:32	59.7	72.9	62.9	44.7
08/07/2017 09:33:32	61.7	72.8	63.8	46.7
08/07/2017 09:38:32	58.4	68.2	62.8	46.2
08/07/2017 09:43:32	59.6	65.6	63.4	50.2
08/07/2017 09:48:32	61.6	65.8	63.8	47.8
08/07/2017 09:53:32	58.8	64.3	62.7	47.4
08/07/2017 09:58:32	58.4	67.8	63.2	47.4
08/07/2017 10:03:32	61.2	66.2	63.3	49.6
08/07/2017 10:08:32	59.7	64.7	63.3	47.5
08/07/2017 10:13:32	59.6	85.3	63	47.1
08/07/2017 10:18:32	61.1	71	63.5	47.1
08/07/2017 10:23:32	59.6	64.3	62.7	45.7
08/07/2017 10:28:32	57.9	65.3	62.8	47
08/07/2017 10:33:32	60.7	75.5	63	47.8
08/07/2017 10:38:32	60.7	65.3	63.3	49.7
08/07/2017 10:43:32	54.1	65.7	56.4	48.2
08/07/2017 10:48:32	51.6	62.8	54.4	47.3
08/07/2017 10:53:32	54.8	73.5	58.1	49.3
08/07/2017 10:58:32	53.3	68.5	55	50.3
08/07/2017 11:03:32	51.1	63.2	52.8	48.2
08/07/2017 11:08:32	53.2	69	56.6	48.3
08/07/2017 11:13:32	62.3	70.5	63.8	56.1
08/07/2017 11:18:32	60.8	65.8	63.5	51.2
08/07/2017 11:23:32	62.1	68.4	64.4	49.6
08/07/2017 11:28:32	60.3	79.8	62.9	50.8
08/07/2017 11:33:32	58.2	65.6	62.9	47.3
08/07/2017 11:38:32	61.1	66.1	63.3	51
08/07/2017 11:43:32	61.6	84	62.9	49.6
08/07/2017 11:48:32	58.9	69.6	63	46.3
08/07/2017 11:53:32	59.8	65.8	63	46.4
08/07/2017 11:58:32	61.6	69.4	63.6	48.7
08/07/2017 12:03:32	58.6	64.7	62.7	45.9
08/07/2017 12:08:32	58.6	66.9	62.8	46.6

08/07/2017 12:13:32	61.2	65.6	63	45.7
08/07/2017 12:18:32	59.8	67.8	62.8	44.8
08/07/2017 12:23:32	58.1	65.2	62.8	47.2
08/07/2017 12:28:32	61.3	72.6	63.6	49.7
08/07/2017 12:33:32	61.2	64.3	63.3	49.9
08/07/2017 12:38:32	58.4	65.5	62.7	50.3
08/07/2017 12:43:32	59.9	68.5	62.9	48.4
08/07/2017 12:48:32	61	65.7	62.9	48.6
08/07/2017 12:53:32	59	66.4	62.8	47.4
08/07/2017 12:58:32	58.3	65.7	62.8	48.5
08/07/2017 13:03:32	61.1	66	63.3	48.9
08/07/2017 13:08:32	60.2	68.3	62.8	47.3
08/07/2017 13:13:32	58.4	65.9	62.8	46.5
08/07/2017 13:18:32	60	65.1	62.9	44.9
08/07/2017 13:23:32	61.6	68.1	63.4	45.4
08/07/2017 13:28:32	58.7	70.2	62.6	46.8
08/07/2017 13:33:32	60.1	69.9	64.2	46
08/07/2017 13:38:32	61.8	69.3	63.7	48.9
08/07/2017 13:43:32	60.2	64	62.9	47.5
08/07/2017 13:48:32	58.7	65.3	62.8	47.6
08/07/2017 13:53:32	60.3	65.2	62.9	49.5
08/07/2017 13:58:32	61.4	65.2	63.1	52.1
08/07/2017 14:03:32	58.4	64.9	62.7	48.6
08/07/2017 14:08:32	58.9	64.9	62.8	48.1
08/07/2017 14:13:32	61.6	65.8	63.4	52
08/07/2017 14:18:32	60.5	65.9	63.4	50.6
08/07/2017 14:23:32	60	65.8	63.7	50.9
08/07/2017 14:28:32	61.9	66.7	63.9	55.4
08/07/2017 14:33:32	61.7	68.1	63.5	55.7
08/07/2017 14:38:32	59.9	66.8	63.5	51.8
08/07/2017 14:43:32	60.4	65.7	63.6	52.6
08/07/2017 14:48:32	59.1	76	63.2	50.9
08/07/2017 14:53:32	56	67.8	60	49.9
08/07/2017 14:58:32	54.8	64.6	57.8	49.7
08/07/2017 15:03:32	53.9	70.7	56.2	47.2
08/07/2017 15:08:32	53.3	65.2	56.5	47.9
08/07/2017 15:13:32	53.9	65.5	55.8	51.1
08/07/2017 15:18:32	60.8	65.9	63.6	53.5
08/07/2017 15:23:32	62.6	65.8	63.5	61.6
08/07/2017 15:28:32	62.6	67.4	63.6	61.5
08/07/2017 15:33:32	62.5	69.7	63.3	61.5
08/07/2017 15:38:32	62.7	68	63.8	61.5
08/07/2017 15:43:32	60.6	70.8	63.6	47.9
08/07/2017 15:48:32	62.6	76.8	63.5	61.5
08/07/2017 15:53:32	61	65.3	62.9	48.3
08/07/2017 15:58:32	61.3	63.9	62.9	48.7
08/07/2017 16:03:32	61.8	68.3	63.6	51.6
08/07/2017 16:08:32	61.2	63.7	62.8	53.8

08/07/2017 16:13:32	62	65.8	63.5	54.6
08/07/2017 16:18:32	61.5	73.1	63.6	52.6
08/07/2017 16:23:32	62.4	66.8	63.4	61.4
08/07/2017 16:28:32	60.2	66.2	63.2	50.3
08/07/2017 16:33:32	62.6	66.7	63.6	61.5
08/07/2017 16:38:32	64.6	75.7	67	56.9
08/07/2017 16:43:32	61	66.4	63.4	51
08/07/2017 16:48:32	62.9	67.6	63.9	61.6
08/07/2017 16:53:32	60.8	67.2	63.4	53.2
08/07/2017 16:58:32	62.6	66.7	63.6	61.5
08/07/2017 17:03:32	62.6	69.4	63.6	61.5
08/07/2017 17:08:32	60.1	65.6	62.9	51.7
08/07/2017 17:13:32	62.1	63.9	62.9	61.2
08/07/2017 17:18:32	62.2	67	62.9	61.2
08/07/2017 17:23:32	60.1	69	62.8	47.5
08/07/2017 17:28:32	62.2	65.8	62.9	61.2
08/07/2017 17:33:32	62.4	67	63.3	61.3
08/07/2017 17:38:32	61.7	66.3	63.4	50.4
08/07/2017 17:43:32	61.1	66.4	62.8	50.1
08/07/2017 17:48:32	62.4	64	63.1	61.4
08/07/2017 17:53:32	59.8	65.1	62.8	48.5
08/07/2017 17:58:32	62.3	68	62.9	61.2
08/07/2017 18:03:32	62.3	67.2	62.9	61.3
08/07/2017 18:08:32	60.1	66.8	62.9	50.3
08/07/2017 18:13:32	62.5	70.3	63.3	61.6
08/07/2017 18:18:32	62.4	67.2	63.3	61.4
08/07/2017 18:23:32	62.7	67.8	63.8	61.5
08/07/2017 18:28:32	60.5	71.8	63.3	51.5
08/07/2017 18:33:32	62.4	71	63.2	61.3
08/07/2017 18:38:32	61	65	62.9	50.7
08/07/2017 18:43:32	61.8	67.3	62.9	53
08/07/2017 18:48:32	62.7	68.5	63.8	61.4
08/07/2017 18:53:32	60.1	66.4	63.3	53.4
08/07/2017 18:58:32	55.9	75.3	56.6	53.9
<b>Average</b>	60.7	68.4	62.7	50.9
<b>Maximum</b>	64.6	85.6	67	61.6
<b>Minimum</b>	51.1	62.8	52.8	40.5
<b>Evening</b>				
08/07/2017 19:03:32	54.3	66.1	55.9	50.9
08/07/2017 19:08:32	52.6	60.2	54.1	50.9
08/07/2017 19:13:32	57.1	82.7	57.2	51
08/07/2017 19:18:32	55	74.4	57.5	50.1
08/07/2017 19:23:32	53.4	64.8	56.3	49.5
08/07/2017 19:28:32	62.4	73.5	63.1	61.1
08/07/2017 19:33:32	62.4	71.9	63	61.2
08/07/2017 19:38:32	63.1	78.5	63.9	61.5
08/07/2017 19:43:32	62.7	71.1	63.7	61.5
08/07/2017 19:48:32	62.5	70.7	63.3	61.4

08/07/2017 19:53:32	62.5	69.6	63.4	61.4
08/07/2017 19:58:32	62.5	71.1	63.2	61.3
08/07/2017 20:03:32	62.6	67.1	63.9	61.3
08/07/2017 20:08:32	60.1	64.9	62.8	49.5
08/07/2017 20:13:32	61.9	64	62.8	61.1
08/07/2017 20:18:32	62.3	65	62.9	61.3
08/07/2017 20:23:32	62.6	69.4	63.5	61.3
08/07/2017 20:28:32	62.6	70.2	63.5	61.4
08/07/2017 20:33:32	61	70.4	64.1	50.9
08/07/2017 20:38:32	62.7	70.4	63.8	61.4
08/07/2017 20:43:32	62.2	70.9	62.9	61.2
08/07/2017 20:48:32	62.6	69.3	63.7	61.3
08/07/2017 20:53:32	63	70.7	64.4	61.5
08/07/2017 20:58:32	62.7	69	63.7	61.4
08/07/2017 21:03:32	63.1	73.8	64.1	61.4
08/07/2017 21:08:32	60.4	69.3	63.2	51.2
08/07/2017 21:13:32	63.7	87.1	64	61.4
08/07/2017 21:18:32	62.2	66.2	62.9	61.2
08/07/2017 21:23:32	62.2	70.8	62.9	61.1
08/07/2017 21:28:32	62.1	65.4	62.8	61.1
08/07/2017 21:33:32	62.2	69.2	62.9	61.2
08/07/2017 21:38:32	62.5	70.5	63	61.2
08/07/2017 21:43:32	62.2	69.1	62.9	61.2
08/07/2017 21:48:32	62.2	69.5	62.9	61.1
08/07/2017 21:53:32	62	64.7	62.8	61.1
08/07/2017 21:58:32	62.1	66.8	62.8	61.2
08/07/2017 22:03:32	62.5	69.2	63.6	61.2
08/07/2017 22:08:32	62.8	69.3	64.1	61.3
08/07/2017 22:13:32	62.4	64.1	62.9	61.5
08/07/2017 22:18:32	62.9	68.4	64.1	61.7
08/07/2017 22:23:32	62.5	67.3	63.3	61.6
08/07/2017 22:28:32	62.5	68.1	63.4	61.5
08/07/2017 22:33:32	62.3	65.8	63	61.3
08/07/2017 22:38:32	62.3	65.2	62.9	61.3
08/07/2017 22:43:32	62.1	65	62.8	61.2
08/07/2017 22:48:32	62.3	71	62.9	61.2
08/07/2017 22:53:32	62.8	76.6	63.4	61.3
08/07/2017 22:58:32	62.8	73.9	63.5	61.3
<b>Average</b>	62	69.6	62.6	59.5
<b>Maximum</b>	63.7	87.1	64.4	61.7
<b>Minimum</b>	52.6	60.2	54.1	49.5
<b>Night</b>				
08/07/2017 23:03:32	59.8	70.8	62.9	50.2
08/07/2017 23:08:32	57.4	78.3	55.3	50.2
08/07/2017 23:13:32	52.1	72.1	53.1	50
08/07/2017 23:18:32	51.2	69.5	51.9	48.4
08/07/2017 23:23:32	52	71.2	53.4	48.6
08/07/2017 23:28:32	55.4	66.4	60.8	48.6



08/07/2017 23:33:32	58.6	65.5	62.5	48.5
08/07/2017 23:38:32	62.1	71.4	62.8	61.2
08/07/2017 23:43:32	62	67.9	62.8	61.2
08/07/2017 23:48:32	62.3	65.4	62.9	61.3
08/07/2017 23:53:32	62	64.9	62.8	61.1
08/07/2017 23:58:32	63.2	70.8	64.6	61.3
09/07/2017 00:03:32	62.2	65.8	62.9	61.3
09/07/2017 00:08:32	62.3	67.7	63	61.3
09/07/2017 00:13:32	62.3	69.8	62.9	61.2
09/07/2017 00:18:32	62.3	71.1	62.9	61.3
09/07/2017 00:23:32	62.5	72.3	63.1	61.5
09/07/2017 00:28:32	62.3	69.6	62.9	61.3
09/07/2017 00:33:32	63	80	62.9	61.2
09/07/2017 00:38:32	63.4	84.3	63.4	61.5
09/07/2017 00:43:32	62.4	66.1	63.1	61.6
09/07/2017 00:48:32	62.6	68.7	63.4	61.5
09/07/2017 00:53:32	62.5	74.7	63.3	61.4
09/07/2017 00:58:32	62.4	70.3	63.3	61.3
09/07/2017 01:03:32	62.7	72.3	63.6	61.5
09/07/2017 01:08:32	62.5	67.8	63.3	61.5
09/07/2017 01:13:32	64.1	84.5	63.9	61.5
09/07/2017 01:18:32	62.4	72	62.9	61.2
09/07/2017 01:23:32	62.4	75.9	62.9	61.2
09/07/2017 01:28:32	62.6	72.6	63.5	61.3
09/07/2017 01:33:32	62	66.9	62.8	61.1
09/07/2017 01:38:32	62.2	66.5	62.9	61.2
09/07/2017 01:43:32	62	74.5	62.8	61.1
09/07/2017 01:48:32	62	73.6	62.8	61.1
09/07/2017 01:53:32	61.9	63.2	62.7	61.1
09/07/2017 01:58:32	61.9	63.6	62.7	61.1
09/07/2017 02:03:32	61.9	63.4	62.7	61.1
09/07/2017 02:08:32	61.9	75.3	62.7	61.1
09/07/2017 02:13:32	61.9	63.9	62.7	61.1
09/07/2017 02:18:32	62.2	78.4	62.8	61.2
09/07/2017 02:23:32	61.7	62.9	62.6	61
09/07/2017 02:28:32	61.8	63.1	62.7	61
09/07/2017 02:33:32	62	63.2	62.8	61.2
09/07/2017 02:38:32	62	63.5	62.8	61.1
09/07/2017 02:43:32	61.8	64.6	62.7	61.1
09/07/2017 02:48:32	61.9	66.2	62.7	61.1
09/07/2017 02:53:32	61.8	66.3	62.7	61.1
09/07/2017 02:58:32	61.8	64.1	62.7	61.1
09/07/2017 03:03:32	61.9	63	62.7	61.1
09/07/2017 03:08:32	62.1	65.9	62.9	61.2
09/07/2017 03:13:32	51.3	70.8	51.5	46.1
09/07/2017 03:18:32	49.5	59.1	53.1	46.2
09/07/2017 03:23:32	46.8	56.4	47.9	45.3
09/07/2017 03:28:32	47.5	57.9	48.7	45.4

09/07/2017 03:33:32	47.8	61.2	48.4	45.1
09/07/2017 03:38:32	54.2	68	59.3	45.5
09/07/2017 03:43:32	61.6	64.1	62.9	47.1
09/07/2017 03:48:32	62.4	63.8	63.2	61.5
09/07/2017 03:53:32	62.2	63.6	62.9	61.3
09/07/2017 03:58:32	61	76.7	63.1	45.6
09/07/2017 04:03:32	62.7	87.5	62.9	46.9
09/07/2017 04:08:32	60.9	65.2	62.9	45.4
09/07/2017 04:13:32	61.3	79.1	62.8	46.1
09/07/2017 04:18:32	60.5	65.3	62.9	45.7
09/07/2017 04:23:32	61.4	63.8	62.9	45.7
09/07/2017 04:28:32	59.2	65.6	62.9	45.7
09/07/2017 04:33:32	62.3	66	63.2	61.3
09/07/2017 04:38:32	59.4	66.4	62.8	45.1
09/07/2017 04:43:32	59.5	69.9	63	42.1
09/07/2017 04:48:32	61.8	65.9	63.3	44
09/07/2017 04:53:32	60.1	63.8	62.8	42.5
09/07/2017 04:58:32	59	65.3	62.9	41
09/07/2017 05:03:32	60.7	64.7	63	40.8
09/07/2017 05:08:32	61.1	63.7	62.9	40.8
09/07/2017 05:13:32	58.8	65.8	62.9	40.7
09/07/2017 05:18:32	59.2	65.5	62.8	42.1
09/07/2017 05:23:32	61.6	65.4	63.1	43.8
09/07/2017 05:28:32	59.5	65.3	62.8	41.1
09/07/2017 05:33:32	59	76.2	62.9	40.6
09/07/2017 05:38:32	61	68.8	63	42.1
09/07/2017 05:43:32	61.9	85.5	63.3	41.2
09/07/2017 05:48:32	59	66.1	63.5	40.1
09/07/2017 05:53:32	60	65.4	63.1	40.9
09/07/2017 05:58:32	61.8	65.6	63.6	42.7
09/07/2017 06:03:32	58.8	63.6	62.8	39.7
09/07/2017 06:08:32	58.5	65.4	62.9	40
09/07/2017 06:13:32	61.6	66.1	63.5	41.4
09/07/2017 06:18:32	60.4	64.3	63.4	39.4
09/07/2017 06:23:32	58.6	65.1	63.3	40.3
09/07/2017 06:28:32	60.7	65.3	63.5	43.8
09/07/2017 06:33:32	61.5	64.5	63.5	42.2
09/07/2017 06:38:32	58.4	65.3	63	41.5
09/07/2017 06:43:32	58.9	65.7	62.9	41
09/07/2017 06:48:32	61.6	65.9	63.5	41.4
09/07/2017 06:53:32	59.5	63.5	62.8	40
09/07/2017 06:58:32	58.2	65.5	62.9	40.1
<b>Average</b>	61	68.1	61.9	52.1
<b>Maximum</b>	64.1	87.5	64.6	61.6
<b>Minimum</b>	46.8	56.4	47.9	39.4
<b>Day</b>				
09/07/2017 07:03:32	60.9	65.5	63.4	41.8
09/07/2017 07:08:32	60.6	63.6	62.8	42.1

09/07/2017 07:13:32	58.9	67.6	63.6	41.2
09/07/2017 07:18:32	59.5	66.2	63.5	41.3
09/07/2017 07:23:32	42.3	53.4	43.9	40
09/07/2017 07:28:32	41.8	49.8	43.1	40.2
09/07/2017 07:33:32	45.4	57.1	49.6	40.7
09/07/2017 07:38:32	47.8	58.4	49.7	44.1
09/07/2017 07:43:32	43.6	51.4	46.3	41
09/07/2017 07:48:32	59.7	64.7	63.6	42.5
09/07/2017 07:53:32	62.4	63.8	63.2	61.4
09/07/2017 07:58:32	60.9	65.3	63.2	47.3
09/07/2017 08:03:32	62.1	70.8	63.7	48.3
09/07/2017 08:08:32	59.3	65.4	63.3	42.8
09/07/2017 08:13:32	58.9	65.4	63.1	41.4
09/07/2017 08:18:32	61.7	65.4	63.5	42.9
09/07/2017 08:23:32	60.3	65.9	63.1	40.6
09/07/2017 08:28:32	58.8	65.8	63.1	42.4
09/07/2017 08:33:32	60.6	66.1	63.3	44.9
09/07/2017 08:38:32	61	64.3	62.8	46.2
09/07/2017 08:43:32	57.9	65.8	62.4	44
09/07/2017 08:48:32	58.8	66.2	62.8	43.2
09/07/2017 08:53:32	61.1	65.6	62.9	42.6
09/07/2017 08:58:32	59.3	63.2	62.6	42
09/07/2017 09:03:32	58.3	71.7	62.9	40.5
09/07/2017 09:08:32	60.7	65.7	62.9	42.6
09/07/2017 09:13:32	60.5	63.6	62.8	42.6
09/07/2017 09:18:32	58.6	66	62.9	44.4
09/07/2017 09:23:32	59.5	72.8	62.8	42.4
09/07/2017 09:28:32	61.2	66.2	62.9	42.7
09/07/2017 09:33:32	59	72.9	62.7	41.5
09/07/2017 09:38:32	57.9	65.1	62.7	42.9
09/07/2017 09:43:32	60.9	65.6	62.8	47.6
09/07/2017 09:48:32	60.2	68.6	62.7	45.6
09/07/2017 09:53:32	58.1	65.7	62.7	42.1
09/07/2017 09:58:32	59.7	65.7	62.7	42.1
09/07/2017 10:03:32	61	64.7	62.8	44.5
09/07/2017 10:08:32	58	63.5	62.5	41.8
09/07/2017 10:13:32	58.3	65.1	62.7	45.3
09/07/2017 10:18:32	60.9	64.8	62.7	44.4
09/07/2017 10:23:32	59.5	63.4	62.6	43.4
09/07/2017 10:28:32	57.7	64.9	62.5	42.6
09/07/2017 10:33:32	60.1	70.3	62.7	43.4
09/07/2017 10:38:32	60.6	63.2	62.7	45.3
09/07/2017 10:43:32	59.2	73.1	62.6	43.4
09/07/2017 10:48:32	58.9	64.6	62.6	43.5
09/07/2017 10:53:32	61.4	70.4	62.9	51.8
09/07/2017 10:58:32	60.4	69.2	63.4	52
09/07/2017 11:03:32	57.9	65	62.6	42.7
09/07/2017 11:08:32	60.5	65.1	62.8	44.3

09/07/2017 11:13:32	60.4	63.4	62.7	43.3
09/07/2017 11:18:32	57.9	65.7	62.5	46
09/07/2017 11:23:32	59.1	65	62.6	42.6
09/07/2017 11:28:32	50.5	71.1	52.6	42.3
09/07/2017 11:33:32	48.5	58.9	51.9	42.5
09/07/2017 11:38:32	45.3	61	47	42.6
09/07/2017 11:43:32	43.9	49.7	45.3	42.3
09/07/2017 11:48:32	48	57.9	51.2	43.1
09/07/2017 11:53:32	53.4	63.8	61.3	42.2
09/07/2017 11:58:32	62	63.3	62.8	61.1
09/07/2017 12:03:32	62.2	64.9	62.9	61.2
09/07/2017 12:08:32	59.1	63.6	62.6	42.5
09/07/2017 12:13:32	58.7	65.2	62.6	42.7
09/07/2017 12:18:32	60.8	65.5	62.8	43.7
09/07/2017 12:23:32	60.5	64	62.8	43.4
09/07/2017 12:28:32	58.3	65.5	62.7	43.3
09/07/2017 12:33:32	59.6	65.3	62.7	44.7
09/07/2017 12:38:32	61.1	68.7	62.8	44.7
09/07/2017 12:43:32	58.9	65.3	62.7	43.3
09/07/2017 12:48:32	58.2	65	62.7	44.8
09/07/2017 12:53:32	60.9	65.4	62.8	46.4
09/07/2017 12:58:32	60	64.6	62.7	45.3
09/07/2017 13:03:32	57.8	65.5	62.5	44
09/07/2017 13:08:32	59.8	65.5	62.7	43.8
09/07/2017 13:13:32	61	64.8	62.8	43.5
09/07/2017 13:18:32	58	63.2	62.5	44
09/07/2017 13:23:32	58.5	65.3	62.7	44
09/07/2017 13:28:32	61	64.8	62.8	44.8
09/07/2017 13:33:32	59.7	67	62.8	45.2
09/07/2017 13:38:32	58.6	64.9	62.6	44.2
09/07/2017 13:43:32	60.5	65.3	62.8	45.2
09/07/2017 13:48:32	62.3	71.8	63.4	59.5
09/07/2017 13:53:32	57.9	65.2	62.5	45
09/07/2017 13:58:32	59.1	64.6	62.7	43.8
09/07/2017 14:03:32	61	65.1	62.8	43.8
09/07/2017 14:08:32	59	63.4	62.6	44
09/07/2017 14:13:32	58.3	66.1	62.7	44.1
09/07/2017 14:18:32	60.8	65.3	62.8	46.2
09/07/2017 14:23:32	60.3	64.3	62.8	45.1
09/07/2017 14:28:32	57.7	64.9	62.6	43.8
09/07/2017 14:33:32	59.6	65.2	62.7	43.1
09/07/2017 14:38:32	61	65.1	62.8	45.5
09/07/2017 14:43:32	57.9	63.2	62.5	43.5
09/07/2017 14:48:32	59.3	71.6	63	44.5
09/07/2017 14:53:32	61.1	67	62.9	48.9
09/07/2017 14:58:32	59.8	63.4	62.7	50.5
09/07/2017 15:03:32	58	65	62.6	47.3
09/07/2017 15:08:32	60.5	65.1	62.8	46.4

09/07/2017 15:13:32	60.6	63.3	62.8	47.5
09/07/2017 15:18:32	58.1	65.4	62.6	47
09/07/2017 15:23:32	60.6	73	63.3	46.8
09/07/2017 15:28:32	61	66.6	62.8	46.4
09/07/2017 15:33:32	47.3	63.5	49.1	44.5
09/07/2017 15:38:32	48.7	61.6	51.4	44.2
09/07/2017 15:43:32	46.9	58.4	49.4	43.7
09/07/2017 15:48:32	47.5	58.8	49.5	44.7
09/07/2017 15:53:32	50.6	63.3	53.5	44.8
09/07/2017 15:58:32	50.7	62.2	52.5	47.9
09/07/2017 16:03:32	61.6	64.5	63.2	53.1
09/07/2017 16:08:32	62.1	65	62.8	61.2
09/07/2017 16:13:32	59.3	65.5	62.7	44.4
09/07/2017 16:18:32	60.4	65.6	62.8	45
09/07/2017 16:23:32	61.1	63.4	62.8	48.7
09/07/2017 16:28:32	58.3	65	62.6	43.4
09/07/2017 16:33:32	58.5	65	62.6	44.4
09/07/2017 16:38:32	61.9	70.8	63.5	45.7
09/07/2017 16:43:32	59.7	64.1	62.7	44.1
09/07/2017 16:48:32	58	66	62.5	44.8
09/07/2017 16:53:32	60.4	65.5	62.8	43.2
09/07/2017 16:58:32	60.7	63.6	62.8	44
09/07/2017 17:03:32	57.8	65.2	62.5	42.6
09/07/2017 17:08:32	59	65.4	62.7	42.7
09/07/2017 17:13:32	61.2	66.2	62.8	46.2
09/07/2017 17:18:32	59	63.2	62.7	47.3
09/07/2017 17:23:32	57.8	64.8	62.6	43.1
09/07/2017 17:28:32	60.8	65.1	62.8	43.8
09/07/2017 17:33:32	60	64.4	62.7	44.2
09/07/2017 17:38:32	57.9	70.5	62.6	44.4
09/07/2017 17:43:32	59.9	65.8	62.8	44.1
09/07/2017 17:48:32	61.7	68.1	63.8	46.6
09/07/2017 17:53:32	57.8	66.2	62.6	46.3
09/07/2017 17:58:32	59.3	65.4	62.8	44.7
09/07/2017 18:03:32	61.7	65.1	62.8	60.3
09/07/2017 18:08:32	60.1	64	63.4	44.9
09/07/2017 18:13:32	60.4	70.5	63.1	50.1
09/07/2017 18:18:32	62	72.2	63.2	53
09/07/2017 18:23:32	60.6	67.3	62.8	48.3
09/07/2017 18:28:32	59.2	64.9	62.7	45.1
09/07/2017 18:33:32	60.9	65.2	62.8	47.8
09/07/2017 18:38:32	61.3	81.6	62.9	45
09/07/2017 18:43:32	59.6	76.1	62.8	45.4
09/07/2017 18:48:32	60.9	65.7	62.9	45.3
09/07/2017 18:53:32	61.5	77.8	62.9	46.9
09/07/2017 18:58:32	59.2	64.7	62.5	45.5
<b>Average</b>	59.5	65.3	61.3	45.1
<b>Maximum</b>	62.4	81.6	63.8	61.4

<b>Minimum Evening</b>	41.8	49.7	43.1	40
09/07/2017 19:03:32	61.9	67.3	62.7	61.1
09/07/2017 19:08:32	59.3	70.2	62.6	44
09/07/2017 19:13:32	61.9	66.1	62.7	61.1
09/07/2017 19:18:32	59.2	64.3	62.5	48.2
09/07/2017 19:23:32	62	64.4	62.8	61.1
09/07/2017 19:28:32	59	64.6	62.4	45.6
09/07/2017 19:33:32	61.9	64.8	62.8	61.1
09/07/2017 19:38:32	45.6	62.7	47.2	43
09/07/2017 19:43:32	47.3	60.6	49.4	44.4
09/07/2017 19:48:32	50.8	68.9	50	43.8
09/07/2017 19:53:32	48.8	65.1	49	43
09/07/2017 19:58:32	45.4	56.9	46.9	42.7
09/07/2017 20:03:32	50.7	72.3	49.7	44
09/07/2017 20:08:32	57.6	64.6	61.9	43.6
09/07/2017 20:13:32	61.7	64.2	62.5	61
09/07/2017 20:18:32	61.7	65.4	62.6	61
09/07/2017 20:23:32	62.2	69.2	62.9	61.1
09/07/2017 20:28:32	61.7	63.5	62.5	61
09/07/2017 20:33:32	61.6	65.5	62.4	60.9
09/07/2017 20:38:32	59.9	67.5	62.7	47.5
09/07/2017 20:43:32	61.7	69.2	62.6	61
09/07/2017 20:48:32	61.6	66.2	62.5	61
09/07/2017 20:53:32	59.1	64.3	62.5	42.4
09/07/2017 20:58:32	61.7	64.7	62.6	61
09/07/2017 21:03:32	58.9	64.6	62.4	43.6
09/07/2017 21:08:32	61.8	65.8	62.7	61
09/07/2017 21:13:32	59	64.8	62.2	43.4
09/07/2017 21:18:32	61.8	64.8	62.7	61
09/07/2017 21:23:32	62.1	67.5	63.2	61
09/07/2017 21:28:32	59.2	65.1	62.6	43.4
09/07/2017 21:33:32	61.7	63.1	62.6	61
09/07/2017 21:38:32	59.2	64.2	62.5	43.2
09/07/2017 21:43:32	61.8	63	62.6	61
09/07/2017 21:48:32	59.3	66.6	62.7	43.9
09/07/2017 21:53:32	61.9	66.7	62.8	61.1
09/07/2017 21:58:32	59.3	65.4	62.6	43.8
09/07/2017 22:03:32	61.7	63.4	62.6	61
09/07/2017 22:08:32	59.3	64.9	62.7	43
09/07/2017 22:13:32	61.9	63.3	62.7	61.1
09/07/2017 22:18:32	61.8	63.2	62.7	61.1
09/07/2017 22:23:32	59.2	65	62.7	43.1
09/07/2017 22:28:32	62.2	63.5	62.9	61.2
09/07/2017 22:33:32	59.6	66.4	62.9	43.3
09/07/2017 22:38:32	62.2	67.9	62.9	61.1
09/07/2017 22:43:32	61.7	70.8	62.9	60.3
09/07/2017 22:48:32	60	63.7	62.8	43.4

09/07/2017 22:53:32	61.6	65	62.9	48.6
09/07/2017 22:58:32	60.1	64	62.7	41.4
<b>Average</b>	60.4	65.3	60.9	52.5
<b>Maximum</b>	62.2	72.3	63.2	61.2
<b>Minimum</b>	45.4	56.9	46.9	41.4
<b>Night</b>				
09/07/2017 23:03:32	61.4	64.9	62.8	45.4
09/07/2017 23:08:32	60.4	63.1	62.7	42.6
09/07/2017 23:13:32	61.1	64.9	62.7	42.3
09/07/2017 23:18:32	60.9	67.5	62.8	42.2
09/07/2017 23:23:32	60.8	65.1	62.9	44.2
09/07/2017 23:28:32	61	63.9	62.7	45.8
09/07/2017 23:33:32	60.3	64.9	62.8	42.5
09/07/2017 23:38:32	61.4	65.3	62.7	46.6
09/07/2017 23:43:32	62.3	64.1	62.9	61.3
09/07/2017 23:48:32	46.2	65.6	45	41.6
09/07/2017 23:53:32	45.6	63.9	45.5	42.1
09/07/2017 23:58:32	43.8	58.4	45.1	42
10/07/2017 00:03:32	53.4	65.9	59.8	42.4
10/07/2017 00:08:32	44.6	61.8	45.2	42.1
10/07/2017 00:13:32	52.9	67.2	57	43.5
10/07/2017 00:18:32	61.6	63.3	62.8	56.5
10/07/2017 00:23:32	62.2	64	62.9	61.2
10/07/2017 00:28:32	61.9	63.1	62.8	61.1
10/07/2017 00:33:32	62.1	67.3	62.8	61.2
10/07/2017 00:38:32	61.9	65.2	62.8	61.1
10/07/2017 00:43:32	62.5	67.4	63.5	61.2
10/07/2017 00:48:32	61.8	63	62.7	61.1
10/07/2017 00:53:32	61.9	64.9	62.7	61.1
10/07/2017 00:58:32	61.5	78.5	63	44.8
10/07/2017 01:03:32	61.2	77.3	62.8	43.5
10/07/2017 01:08:32	59.6	65.2	62.9	43.1
10/07/2017 01:13:32	61.2	65.9	62.9	43
10/07/2017 01:18:32	61.1	64.8	63.3	42.6
10/07/2017 01:23:32	59.3	65.1	63	42.9
10/07/2017 01:28:32	60.6	65.4	63.5	41.3
10/07/2017 01:33:32	61.8	64.4	63.5	44
10/07/2017 01:38:32	59.1	65.5	63.2	41.1
10/07/2017 01:43:32	59.2	65	62.9	42.6
10/07/2017 01:48:32	62	65.7	63.6	44.9
10/07/2017 01:53:32	60	64.1	63.2	42.8
10/07/2017 01:58:32	59	65.6	63.3	41
10/07/2017 02:03:32	61.2	65.5	63.6	41.7
10/07/2017 02:08:32	61.3	64.5	63.6	41.7
10/07/2017 02:13:32	59.1	65	63.7	39.6
10/07/2017 02:18:32	60.3	66	63.7	40.4
10/07/2017 02:23:32	62	65.7	63.8	41.7
10/07/2017 02:28:32	59.4	64.5	63.6	41.1

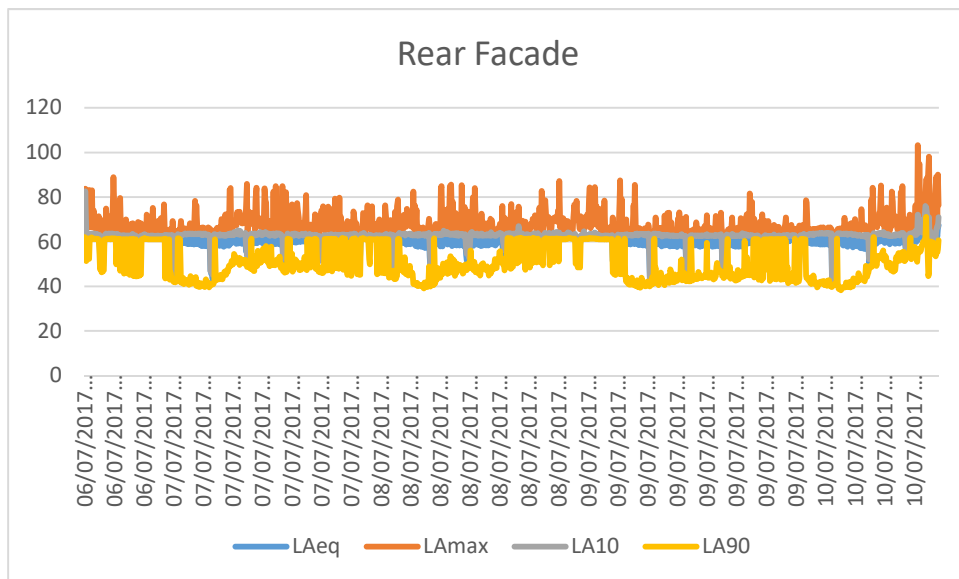
10/07/2017 02:33:32	58.8	65.5	63.6	41.8
10/07/2017 02:38:32	62.1	66.3	63.9	42.1
10/07/2017 02:43:32	60.8	64.8	63.7	41.9
10/07/2017 02:48:32	58.8	66.1	63.6	41.1
10/07/2017 02:53:32	60.9	66.3	63.8	42.3
10/07/2017 02:58:32	61.8	64.9	63.8	42.4
10/07/2017 03:03:32	58.7	66	63.6	40.6
10/07/2017 03:08:32	59.7	65.7	63.7	40.6
10/07/2017 03:13:32	61.8	65.5	63.9	40.9
10/07/2017 03:18:32	59.8	64.9	63.7	40.3
10/07/2017 03:23:32	58.7	65.3	63.7	42.5
10/07/2017 03:28:32	61.6	66.3	63.9	41.8
10/07/2017 03:33:32	60.8	64.3	63.5	42.7
10/07/2017 03:38:32	58.6	65.4	63.7	40.7
10/07/2017 03:43:32	60.6	66.3	63.7	40
10/07/2017 03:48:32	61.8	65.8	63.8	40.6
10/07/2017 03:53:32	41.9	52.4	43.7	39.7
10/07/2017 03:58:32	42.2	51.3	43.9	40.3
10/07/2017 04:03:32	42	46.5	43.1	40.8
10/07/2017 04:08:32	43.2	53.2	44.8	41
10/07/2017 04:13:32	43	58.4	44.6	41
10/07/2017 04:18:32	43.7	57.8	44.8	40.7
10/07/2017 04:23:32	59	64.7	63.1	40.7
10/07/2017 04:28:32	62.3	64.1	63	61.4
10/07/2017 04:33:32	60.1	65.7	63.6	41.3
10/07/2017 04:38:32	62	65.5	63.8	38.8
10/07/2017 04:43:32	60.9	64.1	63.6	39.2
10/07/2017 04:48:32	59.2	66	63.5	39.5
10/07/2017 04:53:32	60	65.8	63.6	38.3
10/07/2017 04:58:32	61.5	65.4	63.4	39.2
10/07/2017 05:03:32	59.2	64.3	63.3	39.5
10/07/2017 05:08:32	58.4	65.7	63.4	39.6
10/07/2017 05:13:32	61.6	65.8	63.7	39.7
10/07/2017 05:18:32	60.3	70.6	63.4	39.4
10/07/2017 05:23:32	58.4	66	63.5	39.7
10/07/2017 05:28:32	60.9	65.7	63.7	41.7
10/07/2017 05:33:32	61.3	64.2	63.6	40.1
10/07/2017 05:38:32	57.8	65.8	63.1	39.7
10/07/2017 05:43:32	59.7	65	63.3	39.7
10/07/2017 05:48:32	61.4	65.8	63.5	41.9
10/07/2017 05:53:32	59.1	67.8	63.4	40.4
10/07/2017 05:58:32	58.6	65	63.3	39.5
10/07/2017 06:03:32	61.6	68.2	63.7	41.9
10/07/2017 06:08:32	60.1	68.4	63.3	42.2
10/07/2017 06:13:32	57.5	65.3	62.9	40
10/07/2017 06:18:32	60.7	66.2	63.2	43.6
10/07/2017 06:23:32	60.7	64	63.2	42
10/07/2017 06:28:32	58.2	70.1	63.3	41.9



10/07/2017 06:33:32	59.8	65.6	63.2	42.5
10/07/2017 06:38:32	61.1	66.1	63	43
10/07/2017 06:43:32	58.1	63.7	62.7	41.9
10/07/2017 06:48:32	58.4	65.3	62.9	43.4
10/07/2017 06:53:32	60.8	65.8	62.9	45.8
10/07/2017 06:58:32	58.9	64	62.6	43.2
<b>Average</b>	60.1	64.8	61.2	43.7
<b>Maximum</b>	62.5	78.5	63.9	61.4
<b>Minimum</b>	41.9	46.5	43.1	38.3
<b>Day</b>				
10/07/2017 07:03:32	57.2	66.5	62.8	42.8
10/07/2017 07:08:32	60.7	65.6	62.9	43.1
10/07/2017 07:13:32	59.9	74.6	62.6	43.4
10/07/2017 07:18:32	57	66.2	62.5	43.2
10/07/2017 07:23:32	59.9	66.1	62.8	43.3
10/07/2017 07:28:32	60.5	66.2	62.8	43.6
10/07/2017 07:33:32	56.7	65.5	62.2	42.3
10/07/2017 07:38:32	60	67.3	63	44.5
10/07/2017 07:43:32	61.1	65.6	63	49.1
10/07/2017 07:48:32	57.8	63.8	62.3	44.2
10/07/2017 07:53:32	58.1	65.4	62.8	45.2
10/07/2017 07:58:32	61.1	66	63.1	45.8
10/07/2017 08:03:32	50.3	60.4	52.1	48.2
10/07/2017 08:08:32	51.7	61.1	54	48.3
10/07/2017 08:13:32	52.9	60.1	55.9	49.2
10/07/2017 08:18:32	54	78.8	55.7	49.4
10/07/2017 08:23:32	50.4	58	52	48.7
10/07/2017 08:28:32	58	84.1	61.3	49
10/07/2017 08:33:32	62.9	71.6	63.8	62
10/07/2017 08:38:32	60.2	67.4	63.4	50.6
10/07/2017 08:43:32	61.7	67.4	63.7	51.7
10/07/2017 08:48:32	61.3	67.4	63.4	52.1
10/07/2017 08:53:32	59	66.9	63.4	49.1
10/07/2017 08:58:32	59.7	66.5	63.2	51.1
10/07/2017 09:03:32	62	70.6	63.8	53.6
10/07/2017 09:08:32	60.5	69.7	63.4	52.3
10/07/2017 09:13:32	60	72.7	63.5	53.5
10/07/2017 09:18:32	61.9	73.6	63.9	53.8
10/07/2017 09:23:32	62.3	85.2	63.4	53.1
10/07/2017 09:28:32	60.3	71.2	63.8	53.1
10/07/2017 09:33:32	61.1	68.1	63.8	55.1
10/07/2017 09:38:32	62.7	68.7	64.4	56.1
10/07/2017 09:43:32	59.8	68.9	62.9	51.6
10/07/2017 09:48:32	59.5	65.7	63.1	52.5
10/07/2017 09:53:32	61.8	65.5	63.6	53.6
10/07/2017 09:58:32	60.9	70	62.9	53.2
10/07/2017 10:03:32	59.7	75.3	62.8	49.6
10/07/2017 10:08:32	60.5	72.4	62.9	48.5

10/07/2017 10:13:32	61.7	68.4	63.4	48.7
10/07/2017 10:18:32	59.2	66.2	62.5	50.6
10/07/2017 10:23:32	58.9	64.8	62.7	48.1
10/07/2017 10:28:32	61	67	62.7	50.3
10/07/2017 10:33:32	59.7	66.8	62.5	47.2
10/07/2017 10:38:32	59.7	82.4	62.5	48.4
10/07/2017 10:43:32	60.8	77.9	62.9	48.1
10/07/2017 10:48:32	61	68.4	62.8	46.6
10/07/2017 10:53:32	59.3	71.9	62.9	48.2
10/07/2017 10:58:32	59	71.5	62.6	47.1
10/07/2017 11:03:32	61.7	69.5	63.3	50.1
10/07/2017 11:08:32	61	67.9	63	53.1
10/07/2017 11:13:32	59.4	66.2	62.9	51.6
10/07/2017 11:18:32	61.1	65.1	63.2	53.7
10/07/2017 11:23:32	61.6	68.1	63.4	54.9
10/07/2017 11:28:32	59.2	65.3	62.8	51.4
10/07/2017 11:33:32	60.4	70	63.4	52.3
10/07/2017 11:38:32	62.4	82.2	63.6	53.6
10/07/2017 11:43:32	61.3	65.9	63.9	53.1
10/07/2017 11:48:32	62.3	84.9	63.9	55.3
10/07/2017 11:53:32	61.8	70.8	63.9	53.5
10/07/2017 11:58:32	61.8	64.9	63.7	55.5
10/07/2017 12:03:32	59.6	65.5	62.9	51.3
10/07/2017 12:08:32	58.3	65.6	60.8	54.6
10/07/2017 12:13:32	55.6	69.9	57.1	52.1
10/07/2017 12:18:32	54.8	66.8	56	53.2
10/07/2017 12:23:32	55.9	63.1	57.3	54.1
10/07/2017 12:28:32	55.7	61.1	58.2	53.2
10/07/2017 12:33:32	57.3	67.6	58.7	55
10/07/2017 12:38:32	62.2	72.1	63.7	56.5
10/07/2017 12:43:32	62.7	65.2	63.7	61.8
10/07/2017 12:48:32	60.4	64.6	63.3	52.2
10/07/2017 12:53:32	61.6	70.5	63.8	55
10/07/2017 12:58:32	61.8	65	63	55.2
10/07/2017 13:03:32	60.4	67.9	63.1	54
10/07/2017 13:08:32	60.5	70.2	63.2	56
10/07/2017 13:13:32	62.1	71.5	63.7	57.6
10/07/2017 13:18:32	63	76.2	65	57.3
10/07/2017 13:23:32	59.9	65.9	63.1	53.3
10/07/2017 13:28:32	60.2	65.6	63.4	51
10/07/2017 13:33:32	75.3	103.2	72.1	54.6
10/07/2017 13:38:32	61.5	72.9	64.5	55.3
10/07/2017 13:43:32	66.1	94.9	66.9	56.7
10/07/2017 13:48:32	62.8	78	66	55.5
10/07/2017 13:53:32	62	70.3	65.7	56.2
10/07/2017 13:58:32	64	73.5	67.1	58.1
10/07/2017 14:03:32	62.1	72.6	64	58.4
10/07/2017 14:08:32	66.4	76.7	69.9	60

10/07/2017 14:13:32	65.2	76.3	68	59.2
10/07/2017 14:18:32	67.2	78.5	70.5	59
10/07/2017 14:23:32	72.2	80.1	76	62.6
10/07/2017 14:28:32	73.8	87.7	75.6	71.1
10/07/2017 14:33:32	68.9	88.5	73.5	58.7
10/07/2017 14:38:32	67.2	82.5	70.1	59
10/07/2017 14:43:32	66.3	92.7	69.3	44.6
10/07/2017 14:44:49	76.6	98	71	45.8
10/07/2017 14:52:06	62.1	77.1	63	60.1
10/07/2017 14:57:06	62.9	72.9	64.5	59.9
10/07/2017 15:02:06	61.4	69.8	62.6	60.1
10/07/2017 15:07:06	60.8	65.4	61.7	59.9
10/07/2017 15:12:06	60.8	65.3	61.9	59.4
10/07/2017 15:17:06	60.8	70.2	61.9	59.5
10/07/2017 15:22:06	57.4	69.9	60.3	54.5
10/07/2017 15:27:06	58.8	79.9	60.1	55
10/07/2017 15:32:06	60.4	85.5	62.3	53.4
10/07/2017 15:35:28	65.2	89	65.3	56.2
10/07/2017 15:36:40	62.3	70.3	67	55.2
10/07/2017 15:42:54	66.1	90.1	66.6	56.7
10/07/2017 15:43:33	67.4	76.4	71	60.6
<b>Average</b>	64	71.7	63.5	52.8
<b>Maximum</b>	76.6	103.2	76	71.1
<b>Minimum</b>	50.3	58	52	42.3



Civil Engineering

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Drainage

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Flood Risk

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Transport

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Highways

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Structures

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Geotechnics

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Contamination

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Sustainability

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Noise & Air Quality

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Utilities

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Geomatics

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