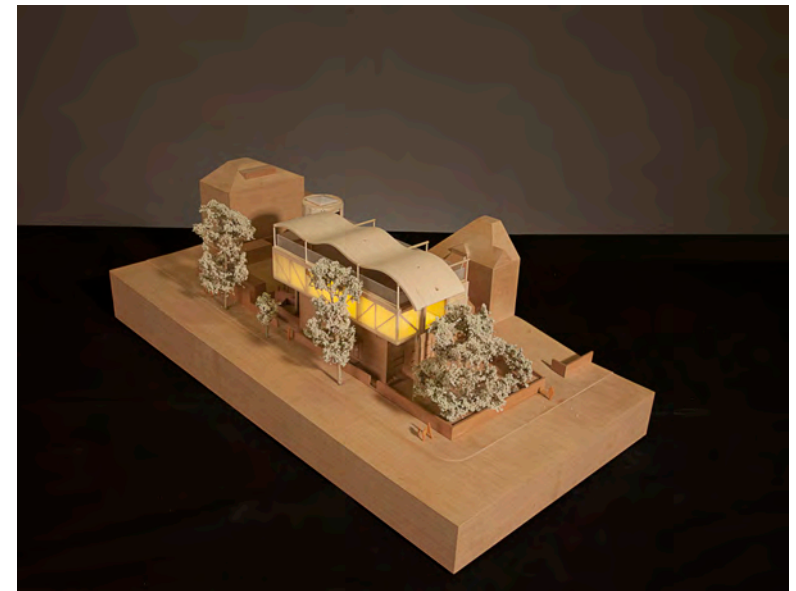


THE MULBERRY HOUSE SCHOOL, SHOOT UP HILL, LONDON NW2 3XL



REMOVAL / VARIATION OF A CONDITION TO PLANNING PERMISSION NO. 2015/5184/P

Design and Access Statement

26 September 2016

THE MULBERRY HOUSE SCHOOL, SHOOT UP HILL, LONDON NW2 3XL

REMOVAL / VARIATION OF A CONDITION TO PLANNING PERMISSION NO. 2015/5184/P

Design and Access Statement

27 September 2016

1.0 Preamble

- 1.1 As requested by the then Planning Officer, a report was submitted on 20 May 2016 setting out ten amendments to the planning permission and their justification and design characteristics.
- 1.2 On 19 August 2015, the Planning Officer who took over the case, wrote explaining the need to talk through the proposed variations / amendments.
- 1.3 The Local Planning Authority – through the new Planning Officer – subsequently asked that the variations / amendments be dealt with – not as one package as recommended by the then Planning Officer prior to the 20 May 2016 submission – but in two forms.
- 1.4 What was jointly considered to be non-material variations / amendments – six of the original ten – were submitted to the Local Planning Authority on 26 September 2016. The numbering – 1, 2, 5, 6, 7, and 9 – maintaining the numbering found in the 20 May 2016 document – for continuity reasons.
- 1.5 This Planning Statement considers the remaining four proposed variations / amendments and is submitted as part of a ‘Variations to Conditions’ application, under Section 73 of the Town and Country Planning Act 1990, as recommended to be the appropriate route in an email dated 19 September 2016 from the LPA.
- 1.6 The numbering for consideration of the variations / amendments – 3, 4, 8, and 10 – maintains the numbering on the 20 May 2016 document for continuity reasons.

2.0 The Variations / Amendments

2.1 Variation / Amendment No3 Heat pump and enclosure

During design development, it has become necessary / desirable to utilise a Heat Pump for the generation of energy for the building's ventilation system. Camden's Building Control Officer in charge of the project (Anthony Bourke) became involved in the problems associated with the original design approach to internal air quality – overheating on a limited number of summer days.

He was in full support that this be avoided and hence it was deemed necessary / desirable to vary / amend the ventilation design strategy.

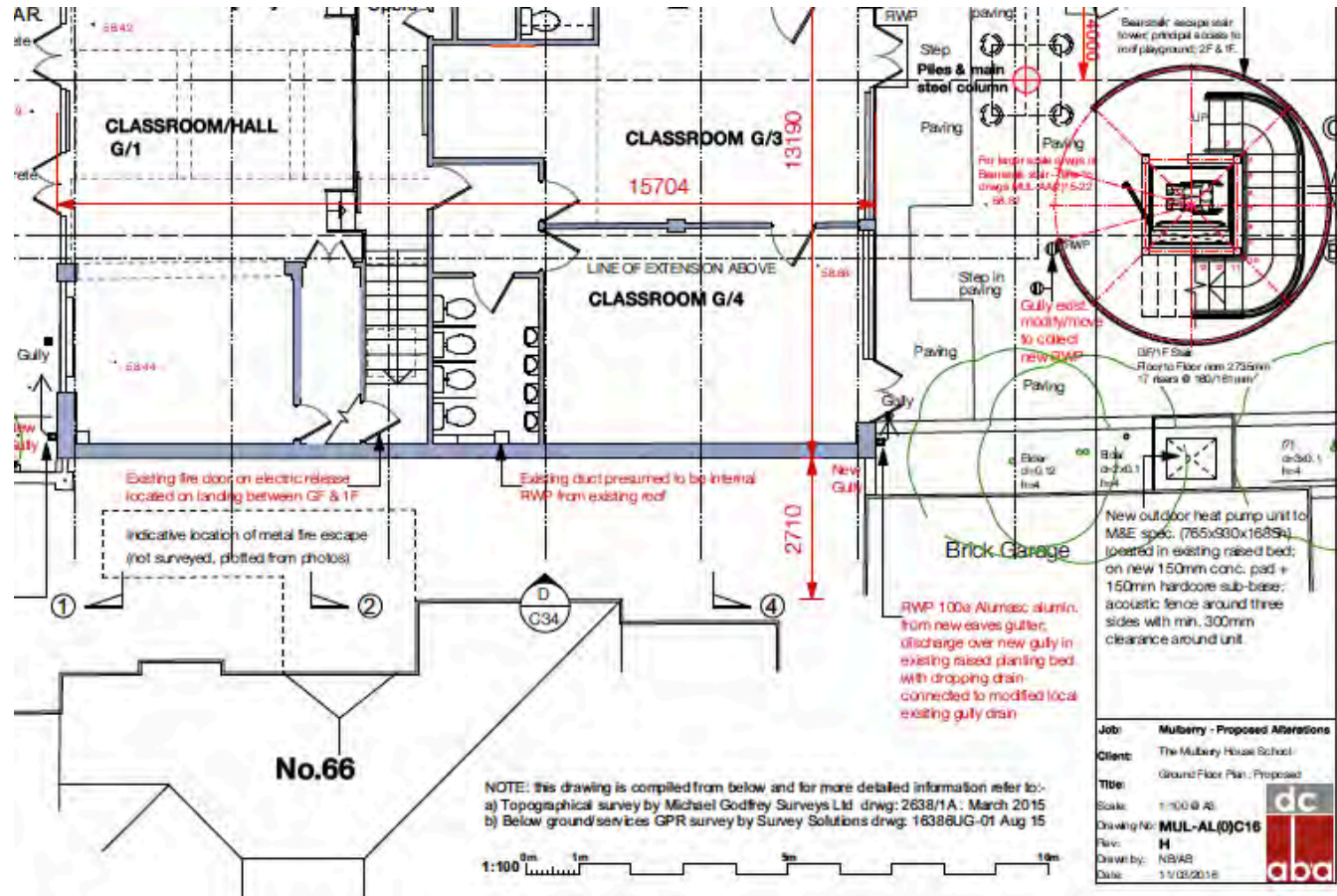
The Heat Pump will be located to the rear side of the Beanstalk on the low wall adjacent to the garage wall to the property, 66 Shoot Up Hill. This location is illustrated on Drawing No MUL-AL(0)C16 REV H found on page 3 of this Design Statement.

The Heat Pump to be used is a Daikin REYQ8T, an environmentally benign machine. A 26-page 'Environmental Noise Impact Assessment' is attached to this Planning Statement at Appendix One, and this sets out the acceptable noise impact of this varied / amended design approach to the quality internal ventilation within the new school classrooms.

On 23 April 2016 the Consultant M&E Engineers for the building p3r (Mike Popper) wrote:

“Doug ... they (Gillieron Scott Acoustic Consultants) have confirmed that no acoustic measures are required.”

The proposed enclosure therefore will be visual only – of mill finish natural aluminium construction – 1790 mm high and 1000 mm wide. This proposed material for the enclosure can also be found on Page 3 of this Design Statement.

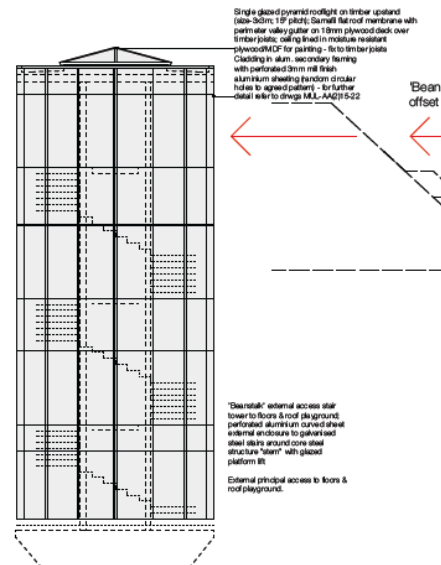


Location of the Daikin REYQ8T heat pump to the side of the 'Beanstalk', and the proposed material for a visual-only enclosure, as there are no requirements for acoustic treatment (MUL-AL(0)C16 REV H)

2.2 Variation / Amendment No4

Cladding to the 'Beanstalk' open-to-the-air stair and lift altered to satisfy the Building Control Officer

Due to flame-spread reasons, the original proposal to use polycarbonate to clad the 'Beanstalk' lift and stair element does not meet the requirements of the Building Regulations. It is therefore proposed to use a permitted material – a mill finish natural aluminium sheet, with differing sized perforations. These differing sized holes represent different ages of the children who will use the open-to-the-air 'Beanstalk' stair, while still ensuring that no driving rain will obstruct access requirements. An example of the panels proposed to be used – in natural aluminium – is illustrated below. It should be understood that while this image is dark, the material to be used at Mulberry will be of a natural aluminium colour. The relevant elevation (part of drawing MUL-A(0)C32), the detail of one of the panels, and a photograph of the model of the building that shows the 'Beanstalk' are found on this page of the Design Statement. Detailed drawings are illustrated on page 4.



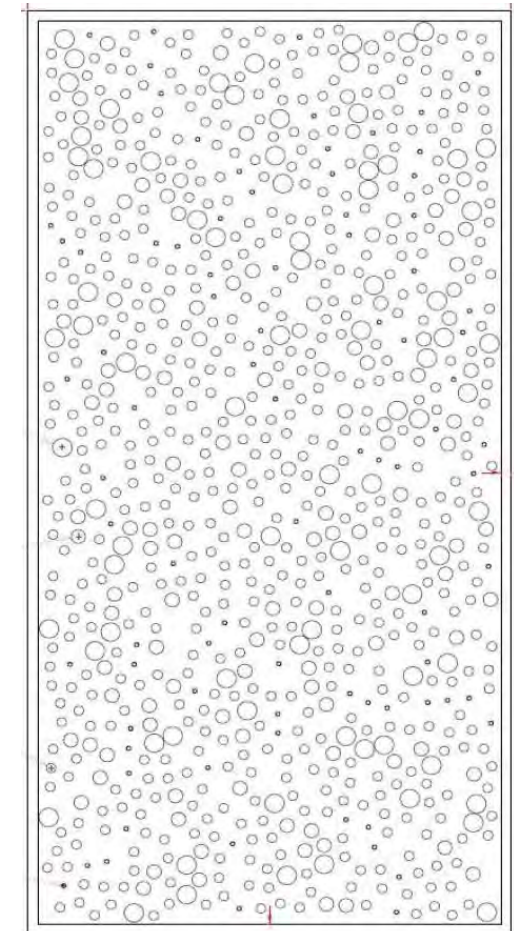
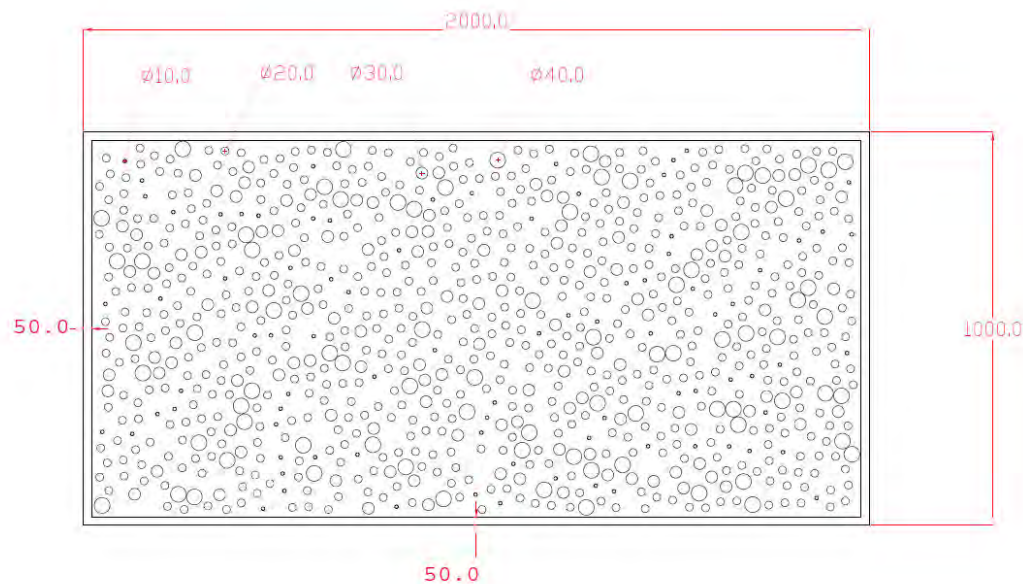
Cladding to the 'beanstalk' stair and lift changed to perforated aluminium to satisfy the Building Control Officer on spread of fire (MUL-A(0)C32)

Clear Line
 Rawson Spring Way
 Sheffield
 S6 1PG
 United Kingdom
 Visit www.clear-line.co.uk
 Telephone 0044 (0)114 231 5444
 Fax 0044 (0)114 251 7375
 E-mail enquiries@clear-line.co.uk



M1889 Mulberry House School

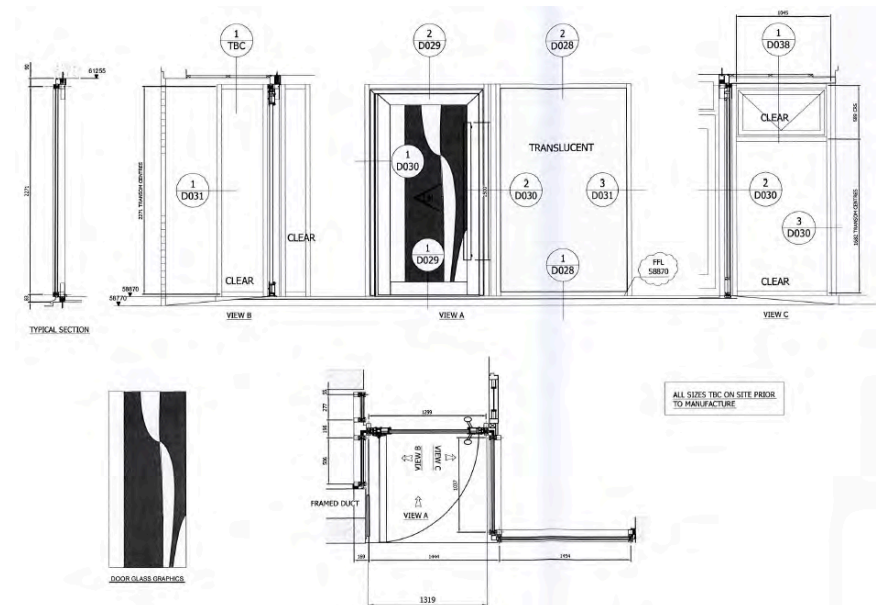
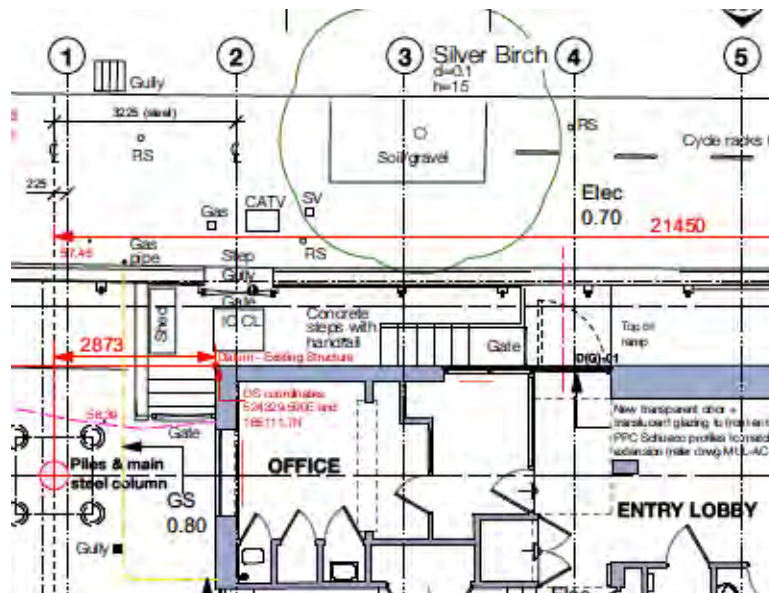
Random Bubble Pattern



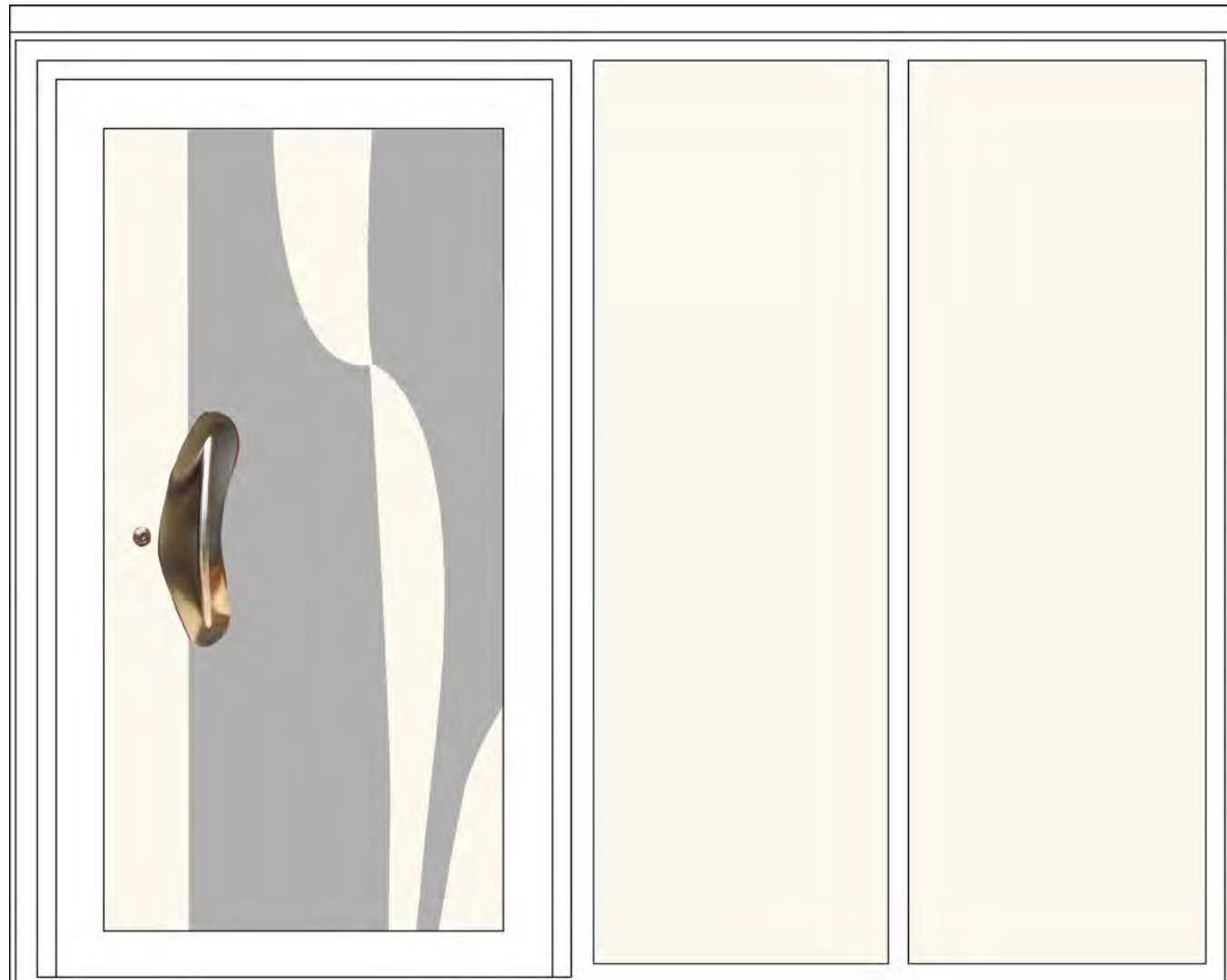
Detail drawings of the proposed cladding to the Beanstalk with dimensions on the left (MUL-B-CI-01) and the upright fixing proposed (MUL-B-CI-02)

2.3 Variation / Amendment No8 New front door screen and canopy

A new front door to replace the existing one is proposed to satisfy the Building Control Officer's requirement that the door be recessed to enable escape in the event of fire to both front and rear playgrounds. The existing door, when opened, blocks access to the front playground. The proposed screen and door is illustrated on this page (MUL-0008). The door will be of etched glass, to the design found on page 7 of this Design Statement (MUL-009). To provide protection from weather, a canopy is proposed. This is designed as a miniaturisation of the 'Cloud' roof over the roof play area. Drawing MUL-AC(3)7 illustrating this canopy and its generating geometry and materiality is found on page 8 of this Design Statement.



Location for the change (part of MUL-AI(0)C16 H) and the proposed screen and door of natural anodised aluminium frames and glass (MUL-008)



New front door – etching on glass providing vision panels – and screen in translucent glass as with main Minster Road Elevation panels (MUL-009)

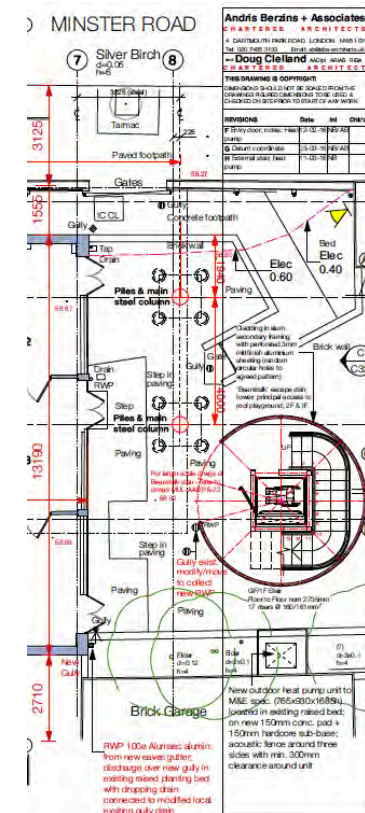
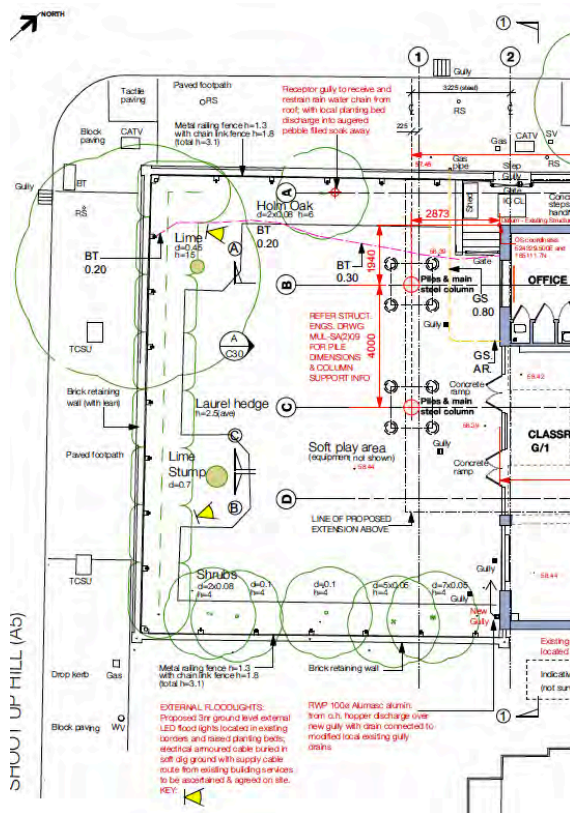


Proposed entrance canopy to provide weather protection for children and parents – steel construction with natural aluminium finish (MUL-AC(3)7)

2.4 Variation / Amendment No10

External lighting

Subtle up-lighting is proposed in a way that will not result in light pollution for neighbours. There will be two low level lamps to the front and one low level lamp to the rear. They will be located as shown below on drawing MUL-AL(0)C16H (yellow arrows) and the lamp type can be found on Page 10 of this Design Statement.



Proposed external lighting – two low level lamps in the front and one low level lamp in the rear locations shown with yellow arrows – MUL-AL(0)C16H

28 75 – Technical amendments reserved

Product data sheet Floodlight IP 65   **BEGA** 7529

Project - Reference number Date

Application
Floodlight with mounting box for permanent installations on a wall, under a ceiling or on a pillar.
Floodlight for the illumination of trees, buildings, walls and advertising boards and many other lighting tasks in interior and exterior lighting applications.

Product description
Floodlight made of aluminium alloy, aluminium and stainless steel.
Clear safety glass.
Silicone gasket.
Reflector made of anodised pure aluminium.
Rotation range of floodlight 350°.
Swivel range of the floodlight around the horizontal axis +85°/-30°.
Mounting box with 2 fixing holes ø 6.5 mm - 87 mm spacing.
2 cable entries for through-wiring of mains supply cable up to ø 10.5 mm max. 3 x 1.5°.
2 prefabricated cable ducts for surface mounted mains supply cables.
Plug connection.
Connecting terminal 2.5°.
Earth conductor connection.
Lampholder GX 24 q-3.
Electronic ballast.
220-240 V ~ 50/60 Hz.
DC 175-250 V.
DC Start ≥ 198 V.
Safety class I.
Protection class IP 65.
Dust tight and protection against water jets.
 - Safety mark.
 - Conformity mark.
Weight: 3.0 kg.

Light technique
Floodlight with rotationally symmetrical light distribution.
Half beam angle 57°.
By changing the diffuser lens it is possible to alter the symmetrical light distribution into a wide beam or flat beam light distribution.
For coloured light the floodlight can be equipped with a dichroic colour effect filter.

Luminaire data for the light planning program DALux for outdoor lighting, street lighting and indoor lighting as well as luminaire data in ELLUMDAT and EES-format you will find on the BEGA web page www.bega.com.

Lamp
Compact fluorescent lamp
TC-TEU 26-32 W - GX 24 q-3

Osram:
Dulux T/E Plus 26 W / ... 1800 lm
Dulux T/E Plus 32 W / ... 2400 lm

Philips: PL-T/Ag
26 W - GX 24 q-3 1800 lm
32 W - GX 24 q-3 2400 lm

Please note the lamp manufacturers' operating instructions.

Article No. 7529
Colour graphite, white or silver
graphite - article number
white - article number - **W**
silver - article number - **A**

Accessories
105 Colour effect filter green
106 Colour effect filter blue
107 Colour effect filter yellow
118 Exchangeable lens wide beam
119 Exchangeable lens flat beam
267 Floodlight shield

For the accessories a separate instructions for use can be provided upon request.

Light distribution



The proposed external lamp type (BEGA 7529)

3.0 Access as affected by the proposed variations / amendments

3.1 Heat pump and enclosure

As far as users of the building are concerned, there will be no access implications. The location of the heat pump is within normal access requirements for maintenance.

3.2 Cladding to the ‘Beanstalk’ open-to-the-air stair and lift altered to satisfy the Building Control Officer

As far as users of the building are concerned, there will be no access implications of this change to cladding as the change is driven by the requirements of safety within the Building Regulations.

3.3 New front door screen and canopy

Access will be level and the replacement door wide enough to allow wheelchair movement.

3.4 External lighting

As far as users of the building are concerned, there will be no access implications. Access requirements for maintenance are normal as the units are ground based with protective covers.

Appendix One: Acoustic Report follows from page 12.

Report No:

Mulberry House School Noise Impact Assessment Addendum 03062016.pdf

Date:

03rd June 2016

For:

Mulberry House School

Report Title:

MULBERRY HOUSE SCHOOL

**ENVIRONMENTAL NOISE IMPACT
ASSESSMENT ADDENDUM**

By:

Gillieron Scott Acoustic Design
Office 20,
Wingate Business Exchange,
64-66 Wingate Square
Clapham SW4 0AF

t - 020 8671 2223

e - info@gsacoustics.org

w - www.gsacoustics.org

Gillieron Scott Acoustic Design Ltd shall not be responsible for any use of the report or its contents for any purpose other than that for which it was provided. Should the Client require the distribution of the report to other parties for information, the full report should be copied. No professional liability or warranty shall be extended to other parties by Gillieron Scott Acoustic Design Ltd without written agreement from Gillieron Scott Acoustic Design Ltd.

REVISION SCHEDULE





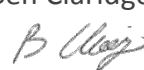

| Document Revision | Date | Document Title | Details | Prepared by | Approved by |
|-------------------|---------------------------------|-----------------------|----------|--|---|
| 00 | 10 th September 2015 | Mulberry House School | Issued | Ben Claridge  | Tim Scott  |
| 01 | 27 th May 2016 | Mulberry House School | Addendum | Ben Claridge  | Tim Scott  |
| 02 | 03 rd June 2016 | Mulberry House School | Addendum | Ben Claridge  | Tim Scott  |

TABLE OF CONTENTS

| | |
|---|-----------|
| INTRODUCTION | 4 |
| 1.0 SUMMARY | 4 |
| 2.0 PLANT NOISE ASSESSMENT CRITERIA | 5 |
| 3.0 NOISE SURVEY DETAILS..... | 5 |
| 3.1 Noise Survey..... | 5 |
| 3.2 Noise indices..... | 5 |
| 4.0 SURVEY RESULTS | 6 |
| 5.0 PLANT NOISE ASSESSMENT | 7 |
| 6.0 UNCERTAINTY | 7 |
| 7.0 STATEMENT OF COMPETENCE | 8 |
| 8.0 CONCLUSION | 8 |
| APPENDICES..... | 9 |
| APPENDIX A: Overview plan and site photo | 10 |
| APPENDIX B: Proposed plant location..... | 11 |
| APPENDIX C: Time series survey results | 12 |
| APPENDIX D: Equipment and Procedure | 13 |
| APPENDIX E: DAIKIN REYQ8T DATASHEET | 14 |
| APPENDIX F: Acoustic Feature Corrections..... | 15 |
| APPENDIX G: Survey Results - Data..... | 16 |
| APPENDIX H: Glossary of Acoustic Terms | 26 |

INTRODUCTION

Proposals are being submitted to the London Borough of Camden to alter and extend some existing school accommodation at Mulberry House School, 68 Shoot Up Hill London, NW2 3XL.

Gillieron Scott Acoustic Design have been commissioned to undertake a background noise survey and noise impact assessment in accordance with BS4142.

This report assesses the proposed plant in accordance with the London Borough of Camden's noise policies.

The findings of the noise impact assessment are presented in the following sections of this report together with the supporting Figures and Appendices.

1.0 SUMMARY

An environmental noise survey was undertaken over an extended period at a position representative of the immediate noise environment of the neighbouring properties of Mulberry House School.

The measurement position is shown in Appendix A.

It is proposed that the operational hours of the condenser unit are between 0700 and 2300 hours.

The survey results show that the representative background noise level measured over the survey period between the hours of 0700 and 2300 was 60 dB $L_{A90,15min}$.

GSAD's assessment outlined in this report indicates a rating level 15 dB below the background sound level which indicates a low likelihood of adverse impact.

2.0 PLANT NOISE ASSESSMENT CRITERIA

BS4142: 2014 provides methods for rating and assessing industrial and commercial sound. The standard is used to rate sound from fixed installations. The standard requires a “Specific Sound Level”, in terms of L_{Aeq} , is determined either by measurement or calculation at a receptor location. This Specific Sound Level may then be corrected for the character of sound and is then termed the “Rating Level”.

Once the Rating Level has been determined, the background sound level is subtracted from it and the greater the difference, the greater the likelihood of an ‘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. The standard advocates that each site and situation should take the context of the scenario into consideration and that “not all adverse impacts will lead to complaints and not every complaint is proof of an adverse impact”.

The standard provides reference periods over which the assessment should take place which have been reproduced in the table below.

Table 1 – Reference Periods

| Period | Hours | Assessment Period |
|--------------------|-------------|-----------------------------|
| Typical Daytime | 0700 – 2300 | 1 hour assessment period |
| Typical Night-time | 2300 – 0700 | 15 minute assessment period |

3.0 NOISE SURVEY DETAILS

3.1 Noise Survey

Background noise levels have been measured over an extended period on the roof of the existing school building. The measurement position is shown on the drawings in Appendix A.

The prevailing noise environment is dominated by road traffic noise.

The equipment was set up to integrate sound levels over 15-minute intervals between 11:30, 7th August 2015 and 10:45, 11th August 2015.

The weather was generally calm and clear throughout.

Details of equipment and procedure used are shown in Appendix D.

3.2 Noise indices

The equipment was set to record octave band sound pressure levels at 15minute intervals. The following noise indices used in this assessment are as follows:

$L_{Aeq,T}$: The A-weighted equivalent continuous sound pressure level over a period of time, T.

$L_{Amax,T}$: The A-weighted maximum sound pressure level that occurred during a given period. Measured using the fast (L_{AFmax}) or slow (L_{ASmax}) time weightings.

$L_{A90,T}$: The A-weighted sound pressure level exceeded for 90% of the measurement period. Indicative of the background noise level.

$L_{A1,T}$: The A-weighted sound pressure level exceeded for 1% of the measurement period. Indicative of the maximum noise level.

The L_{A90} is considered most representative of the background noise level for the purposes of complying with any Local Authority requirements.

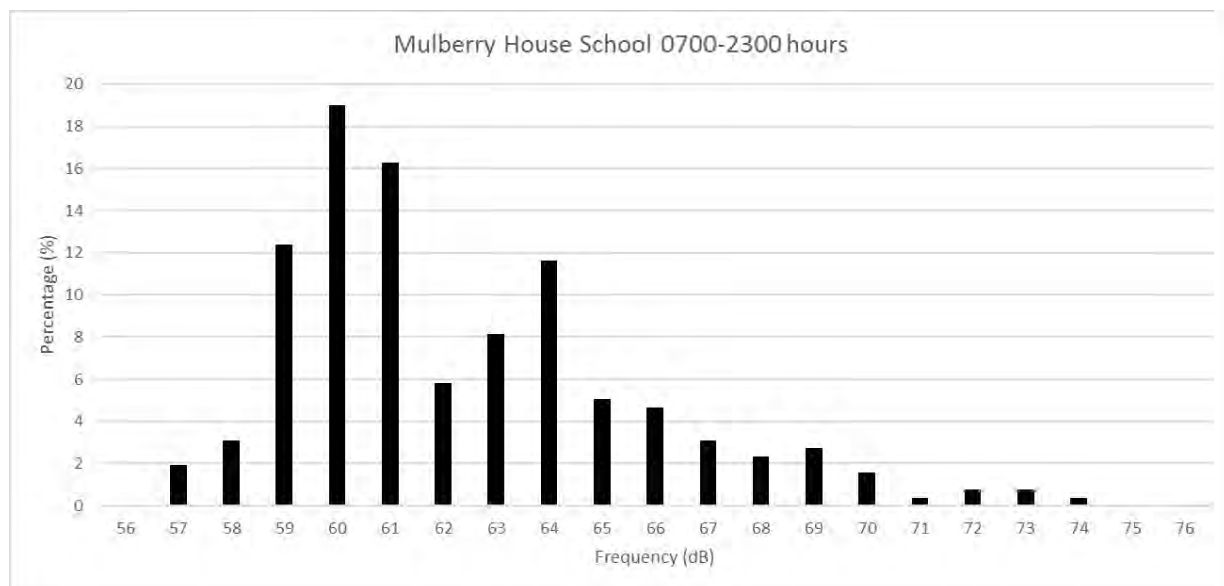
Sound pressure level measurements are normally taken with an A-weighting (denoted by a subscript 'A', eg L_{A90}) to approximate the frequency response of the human ear.

4.0 SURVEY RESULTS

The table below shows the results from the noise survey undertaken at the measurement position.

| Period | Representative $L_{A90, 15min}$ (dB) |
|-----------|--------------------------------------|
| 0700-2300 | 60 |
| 2300-0700 | 53 |

The representative $L_{A90, 15min}$ has been determined for the daytime period using histogram shown below.



A representative measured daytime background sound level of 60 dB $L_{A90, 15min, 0700-2300}$ has been determined. This will be used to assess noise from the condenser.

The full survey results (to one decimal place) are shown in Appendix G.

5.0 PLANT NOISE ASSESSMENT

1x Daikin REYQ8T condenser unit is proposed to be installed at low level at the boundary wall as indicated in Appendices A and B. The noise level of this unit is 58 dB(A) at 1m as shown in the datasheet in Appendix E. The most affected façade at the adjacent property to the south-east of the school at first floor level.

The proposed externally mounted air condenser unit(s) serving the school will operate between 0700-2300 hours and a representative daytime background sound level of 60 dB $L_{A90, 15min}$ has been used to assess noise from this unit.

The daytime plant noise assessment for the most affected facade has been carried out in the table below.

Receptor Location 1: Daytime assessment of condenser unit

| Element | Level | Comments |
|---|----------|---|
| Daikin REYQ8T | 58 dB(A) | Sound Pressure Levels @ 1m |
| Acoustic feature corrections | + 8 dB | + 2 dB for Tonality, + 3 dB for Intermittency, +3dB for impulsivity. See Appendix F for details |
| Reflective surfaces | + 6 dB | 2 acoustically hard reflective surfaces in close proximity to units |
| Acoustic Screening | - 10 dB | Acoustic screening afforded by boundary wall |
| Distance Attenuation | - 17 dB | Point source distance attenuation over approximately 6m |
| Rating Level | 45 dB(A) | Rating Level, 1m from most affected window |
| Background Sound Level | 60 dB(A) | Typical background sound level, night-time 0700-2300 |
| Assessment indication | - 15 dB | Rating Level 15 dB below Background Sound Level which indicates a low likelihood of adverse impact |
| Assessment indication with noise mitigation measures in place | | Rating Level 15 dB below Background Sound Level. The existing acoustic environment includes persistent traffic noise. Taking into consideration the context of the situation, the assessment a low likelihood of adverse impact |

A rating level of 45 dB(A) has been calculated at a distance of 1m from the nearest noise sensitive window. This rating level is 15dB below the background sound level which is an indication of a low likelihood of adverse impact.

An explanation for the acoustic feature corrections applied as part of this assessment is provided in Appendix F.

6.0 UNCERTAINTY

The measurement position was subjectively deemed representative of the immediate noise environment of the most affected noise sensitive receptor. The author of this report has a relatively high level of confidence that the measurement position used in this assessment was appropriate.

Although a weather station was not deployed, measurements at the beginning and end of the survey period give a reasonable level of confidence that acoustic measurements were made during conditions that are deemed appropriate.

The meter was calibrated before and after the measurement time interval and a drift of 0.1 dB was noted. This amount of drift in calibration is considered insignificant.

7.0 STATEMENT OF COMPETENCE

The assessment of the industrial sound has been undertaken by the author of this report: Ben Claridge MEng. (Hons.), AMIOA an acoustic consultant with Gillieron Scott Acoustic Design with 2+ years' experience since completing a Master's degree in Acoustical Engineering at the ISVR, University of Southampton and several years in acoustics consultancy prior to this. The author of this report has undertaken numerous assessments according to the 1997 revision of the British Standard and the most recent 2014 revision of the Standard.

8.0 CONCLUSION

A noise survey has been deployed at Mulberry House School in order to determine background sound levels. The survey was carried out from 11:30, 7th August 2015 and 10:45, 11th August 2015.

A representative background sound level over the daytime and night-time reference time intervals has been determined.

Acoustic feature corrections of 8 dB have been applied, based on GSAD's previous experience and the resultant noise emission limits from the proposed units have been calculated to ensure the resultant Rating Level 1m from the most affected receptors adheres to the Local Authority's requirements.

APPENDICES

APPENDIX A: Overview plan and site photo



Measurement location



Proposed plant location, low level at boundary wall

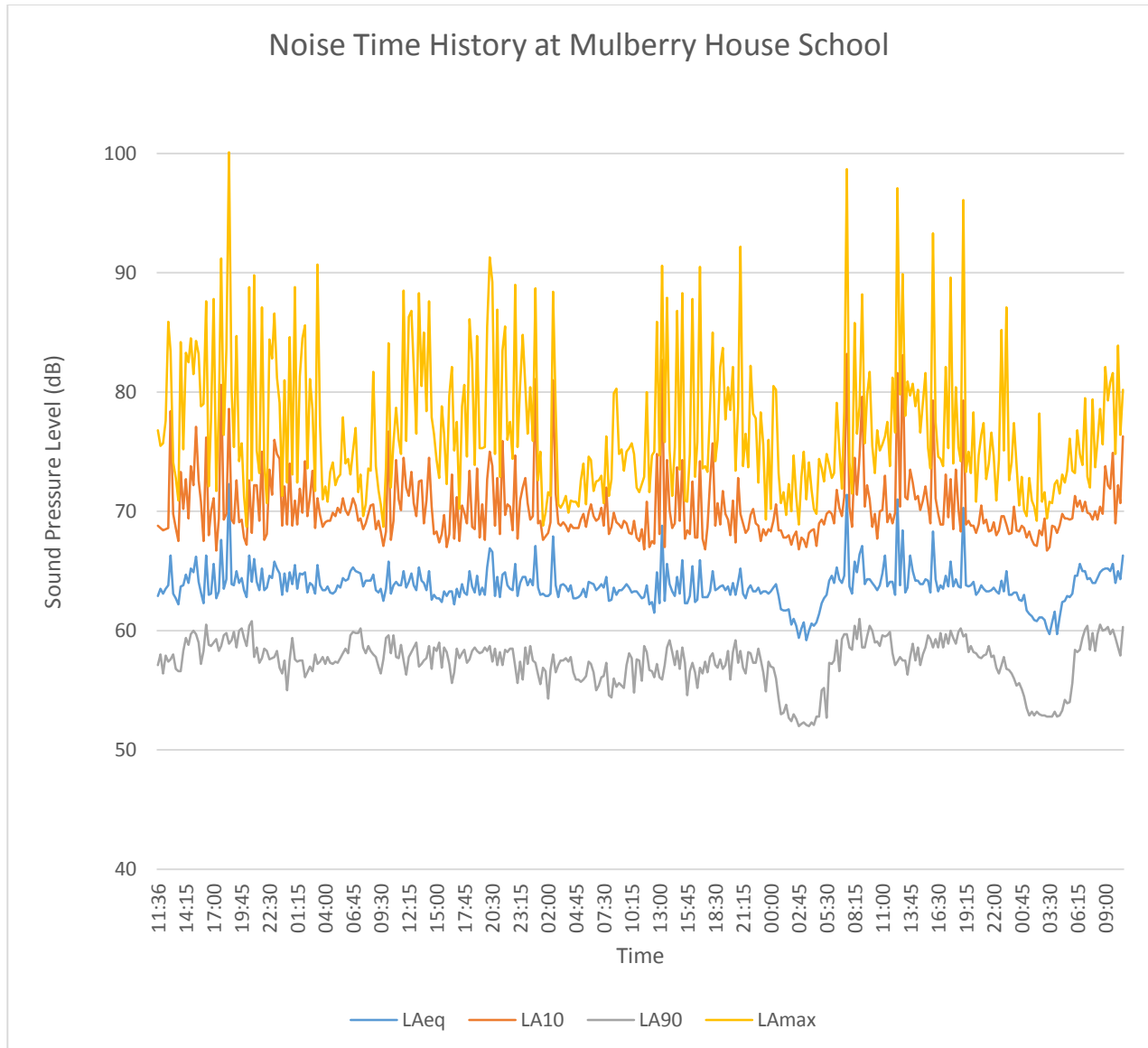
Measurement location on roof

Closest receptor – Receptor location 1

APPENDIX B: Proposed plant location



APPENDIX C: Time series survey results



APPENDIX D: Equipment and Procedure

Background noise levels have been measured over a 95 hour period on the roof of the existing school. The measurement position is shown on the drawings in Appendices A and B.

The prevailing noise environment is dominated by traffic noise and speech at street level.

The equipment was set up to integrate sound levels over 15-minute intervals between 11:30, 7th August 2015 and 10:45, 11th August 2015.

The weather was generally calm and clear throughout.

Measurements were undertaken according to the procedures set out in BS4142:1997.

The levels were recorded as A-weighted and octave band L_{eq} , L_{max} and L_{90} using the following equipment.

Norsonic 118 Real Time Analyser
GRAS Environmental microphone
Norsonic 1251 Calibrator

The equipment was calibrated before and after the survey and no drift from calibration was found.

APPENDIX E: DAIKIN REYQ8T DATASHEET

Heat Recovery

VRV IV Condensing Units

REYQ-T

18 to 20 HP and 22 to 28 HP



5-12 HP



14-20 HP

R-410A

| Outdoor Units | | | 18 HP Single | | 18 HP Multi | | 20 HP Single | | 20 HP Multi | |
|--|------------------------|--------|------------------------|------------------|------------------|-------------------|------------------|------------------|-------------|--|
| | | | REYQ18T | REYQ8T | REYQ10T | REYQ20T | REYQ10T | REYQ10T | | |
| Capacity | Nominal Cooling | kW | 50.00 | 51.00 | | 56.00 | 56.00 | | | |
| | Nominal Heating | kW | 51.00 | 51.00 | | 56.00 | 56.00 | | | |
| Dimensions | Height x Width x Depth | mm | 1685 x 1240 x 765 | 1685 x 930 x 765 | 1685 x 930 x 765 | 1685 x 1240 x 765 | 1685 x 930 x 765 | 1685 x 930 x 765 | | |
| Weight | | kg | 329 | 198 | 205 | 329 | 205 | 205 | | |
| Fan | Air Flow Rate | m³/sec | 4.18 | 2.70 | 2.92 | 4.35 | 2.92 | 2.92 | | |
| Electrical Details | Power Supply | Phase | 3ph / 50 Hz / 380~415V | | | | | | | |
| | Running Current | amps | 24.6A* | 8.9A* | 11.8A* | 31.1A* | 11.8A* | | | |
| | Starting Current | amps | 4A* | | | | | | | |
| | Fuse Rating | amps | 50 | 20 | 25 | 50 | 25 | 25 | | |
| Refrigerant Circuit | Refrigerant Type | | R410A | | | | | | | |
| | Refrigerant Charge | kg | data book | data book | data book | data book | data book | | | |
| | Additional Charge | kg | data book | | | | | | | |
| Sound Pressure | | dBA | 65 | 58 | 58 | 66 | 58 | 58 | | |
| Sound Power | | dBA | 86 | 78 | 79 | 88 | 79 | 79 | | |
| Piping Limits | Maximum Total Length | m | 1000 | | | | | | | |
| | Maximum Actual Length | m | 165 | | | | | | | |
| Piping Connections - Systems | Liquid | inches | 1 1/8 | 3/4 | | 1 1/8 | 1 1/8 | | | |
| | Gas | inches | 5/8 | 3/8 | | 5/8 | 5/8 | | | |
| | Discharge | inches | 7/8 | 5/8 | | 1 1/8 | 1 1/8 | | | |
| Capacity Index Limit | | | 225 ~ 450 | 100 ~ 260 | | 250 ~ 650 | 250 ~ 650 | | | |
| Maximum Number of Connected Indoor Units | | | 64 | 64 | | 64 | 64 | | | |

| Outdoor Units | | | 22 HP Multi | | 24 HP Multi | | 26 HP Multi | | 28 HP Multi | |
|--|------------------------|--------|------------------------|------------------|------------------|------------------|------------------|-------------------|------------------|-------------------|
| | | | REYQ10T | REYQ12T | REYQ12T | REYQ12T | REYQ12T | REYQ14T | REYQ12T | REYQ16T |
| Capacity | Nominal Cooling | kW | 61.50 | | 67.40 | | 73.50 | | 78.50 | |
| | Nominal Heating | kW | 61.50 | | 67.40 | | 73.50 | | 78.50 | |
| Dimensions | Height x Width x Depth | mm | 1685 x 930 x 765 | 1685 x 930 x 765 | 1685 x 930 x 765 | 1685 x 930 x 765 | 1685 x 930 x 765 | 1685 x 1240 x 765 | 1685 x 930 x 765 | 1685 x 1240 x 765 |
| Weight | | kg | 205 | 205 | 205 | 205 | 205 | 319 | 205 | 319 |
| Air Flow Rate | | m³/sec | 2.92 | 3.08 | 3.08 | 3.08 | 3.08 | 3.72 | 3.08 | 4.33 |
| Electrical Details | Power Supply | Phase | 3ph / 50 Hz / 380~415V | | | | | | | |
| | Running Current | amps | 11.8A* | 15.3A* | 15.3A* | | 15.3A* | 17.4A* | 15.3A* | 21.1A* |
| | Starting Current | amps | 4A* | | | | | | | |
| | Fuse Rating | amps | 25 | 32 | 32 | 32 | 32 | 32 | 32 | 40 |
| Refrigerant Circuit | Refrigerant Type | | R410A | | | | | | | |
| | Refrigerant Charge | kg | data book | | data book | | data book | | data book | |
| | Additional Charge | kg | data book | | | | | | | |
| Sound Pressure | | dBA | 58 | 61 | 61 | 61 | 61 | 61 | 61 | 64 |
| Sound Power | | dBA | 79 | 81 | 81 | 81 | 81 | 81 | 81 | 86 |
| Piping Limits | Maximum Total Length | m | 1000 | | | | | | | |
| | Maximum Actual Length | m | 165 | | | | | | | |
| Piping Connections - Systems | Liquid | inches | 1 1/8 | | 1 3/8 | | 1 3/8 | | 1 3/8 | |
| | Gas | inches | 5/8 | | 3/4 | | 3/4 | | 3/4 | |
| | Discharge | inches | 1 1/8 | | 1 1/8 | | 1 1/8 | | 1 1/8 | |
| Capacity Index Limit | | | 275 ~ 715 | | 300 ~ 780 | | 325 ~ 845 | | 350 ~ 910 | |
| Maximum Number of Connected Indoor Units | | | 64 | | 64 | | 64 | | 64 | |

* Preliminary data subject to change

APPENDIX F: Acoustic Feature Corrections

A rating penalty has been established based on a subjective assessment of characteristics. Penalties have been applied based on GSAD's previous experience of condenser units.

A total rating penalty of 8 dB has been applied.

2 dB penalty for tonality: typical condenser units can have tonal components that are perceptible. Tonal components may or may not be audible at the receptors located at a distance of 7m, however, a small correction has been applied to adopt a cautious approach.

3 dB penalty for impulsivity: some condenser units can start up with an initial 'clunk'. Impulsivity of a unit may or may not be audible at the receptors located at a distance of 7m, however, a small correction has been applied to adopt a cautious approach.

3 dB penalty for intermittency: condenser units turn on / off during operation. On / off states may or may not be perceptible at the receptors located at a distance of 7m, however, a small correction has been applied to adopt a cautious approach.

APPENDIX G: Survey Results - Data

| Date | Time | L _{Aeq} | L _{A90} | L _{Aeq} | | | | | | | |
|------------|----------|------------------|------------------|------------------|------|------|------|------|------|------|------|
| | | | | 63 | 125 | 250 | 500 | 1k | 2k | 4k | 8k |
| 07/08/2015 | 11:36:00 | 62.9 | 57.1 | 67.5 | 64.1 | 60.6 | 57.4 | 59.6 | 55.4 | 48.0 | 42.0 |
| 07/08/2015 | 11:45:00 | 63.5 | 58.0 | 68.4 | 60.4 | 59.5 | 58.3 | 60.5 | 56.0 | 48.3 | 40.6 |
| 07/08/2015 | 12:00:00 | 63.1 | 56.4 | 66.7 | 60.2 | 58.7 | 57.6 | 59.9 | 56.0 | 49.5 | 45.2 |
| 07/08/2015 | 12:15:00 | 63.5 | 57.9 | 67.3 | 61.0 | 59.5 | 57.7 | 60.1 | 56.5 | 50.5 | 46.4 |
| 07/08/2015 | 12:30:00 | 63.8 | 57.4 | 67.0 | 62.6 | 59.8 | 59.3 | 61.0 | 55.6 | 48.1 | 41.7 |
| 07/08/2015 | 12:45:00 | 66.3 | 57.6 | 65.9 | 62.8 | 61.5 | 60.0 | 62.7 | 59.9 | 54.3 | 49.6 |
| 07/08/2015 | 13:00:00 | 63.1 | 58.0 | 66.4 | 61.0 | 60.6 | 57.8 | 59.7 | 55.8 | 49.5 | 45.2 |
| 07/08/2015 | 13:15:00 | 62.7 | 56.8 | 65.2 | 59.9 | 59.3 | 56.9 | 59.7 | 55.3 | 48.1 | 40.7 |
| 07/08/2015 | 13:30:00 | 62.2 | 56.6 | 65.5 | 60.6 | 59.3 | 56.9 | 59.0 | 54.6 | 47.6 | 39.6 |
| 07/08/2015 | 13:45:00 | 63.7 | 56.6 | 65.7 | 60.8 | 59.3 | 58.1 | 59.7 | 56.9 | 52.5 | 48.7 |
| 07/08/2015 | 14:00:00 | 63.8 | 58.3 | 80.8 | 64.6 | 61.3 | 59.2 | 60.0 | 55.7 | 50.0 | 47.1 |
| 07/08/2015 | 14:15:00 | 64.7 | 59.4 | 81.0 | 62.9 | 64.0 | 61.3 | 60.3 | 56.2 | 49.4 | 44.5 |
| 07/08/2015 | 14:30:00 | 64.0 | 58.8 | 80.2 | 61.9 | 61.6 | 59.4 | 60.2 | 56.0 | 49.9 | 47.2 |
| 07/08/2015 | 14:45:00 | 65.2 | 59.7 | 81.2 | 60.7 | 61.4 | 62.8 | 61.2 | 56.2 | 51.0 | 47.1 |
| 07/08/2015 | 15:00:00 | 64.9 | 60.0 | 81.2 | 62.6 | 62.2 | 61.8 | 60.6 | 56.6 | 50.9 | 48.5 |
| 07/08/2015 | 15:15:00 | 66.2 | 59.7 | 80.1 | 66.2 | 62.5 | 63.8 | 62.6 | 56.8 | 50.7 | 45.3 |
| 07/08/2015 | 15:30:00 | 64.1 | 59.0 | 80.4 | 62.5 | 61.0 | 60.8 | 60.3 | 55.4 | 49.0 | 43.1 |
| 07/08/2015 | 15:45:00 | 63.2 | 57.2 | 70.7 | 63.5 | 61.4 | 59.0 | 59.7 | 55.1 | 48.3 | 42.0 |
| 07/08/2015 | 16:00:00 | 62.3 | 58.3 | 77.9 | 62.7 | 60.4 | 57.8 | 58.5 | 54.4 | 47.3 | 39.1 |
| 07/08/2015 | 16:15:00 | 66.3 | 60.5 | 81.4 | 66.2 | 63.0 | 62.1 | 62.1 | 58.8 | 53.3 | 46.7 |
| 07/08/2015 | 16:30:00 | 63.0 | 58.8 | 81.2 | 61.6 | 60.2 | 59.4 | 59.1 | 54.5 | 47.6 | 40.7 |
| 07/08/2015 | 16:45:00 | 63.1 | 58.7 | 79.7 | 63.9 | 62.4 | 59.9 | 58.8 | 54.4 | 46.8 | 40.6 |
| 07/08/2015 | 17:00:00 | 65.6 | 59.0 | 76.9 | 64.7 | 64.4 | 61.8 | 61.6 | 58.2 | 49.9 | 42.8 |
| 07/08/2015 | 17:15:00 | 62.7 | 59.3 | 80.6 | 61.0 | 60.0 | 58.9 | 58.9 | 54.4 | 46.4 | 38.7 |
| 07/08/2015 | 17:30:00 | 63.3 | 58.3 | 78.2 | 62.9 | 61.2 | 60.8 | 59.0 | 54.8 | 47.4 | 40.8 |
| 07/08/2015 | 17:45:00 | 67.6 | 58.7 | 79.7 | 62.9 | 60.9 | 60.4 | 63.5 | 62.9 | 48.6 | 39.6 |
| 07/08/2015 | 18:00:00 | 63.5 | 59.6 | 81.4 | 63.6 | 60.5 | 60.3 | 59.1 | 55.2 | 48.0 | 41.7 |
| 07/08/2015 | 18:15:00 | 64.3 | 59.8 | 81.3 | 65.5 | 63.1 | 61.8 | 59.9 | 55.4 | 47.1 | 39.6 |
| 07/08/2015 | 18:30:00 | 72.3 | 58.9 | 81.1 | 61.0 | 60.4 | 60.0 | 66.8 | 69.1 | 51.8 | 39.8 |
| 07/08/2015 | 18:45:00 | 63.9 | 59.2 | 81.0 | 65.1 | 62.1 | 61.6 | 59.5 | 54.9 | 47.6 | 41.2 |
| 07/08/2015 | 19:00:00 | 63.8 | 59.9 | 81.0 | 62.3 | 60.3 | 60.1 | 60.1 | 55.6 | 48.5 | 39.7 |
| 07/08/2015 | 19:15:00 | 65.0 | 58.6 | 81.1 | 63.2 | 62.2 | 60.8 | 60.9 | 58.2 | 49.1 | 40.4 |
| 07/08/2015 | 19:30:00 | 64.0 | 60.0 | 81.1 | 61.9 | 60.8 | 59.8 | 60.4 | 55.7 | 48.3 | 41.5 |
| 07/08/2015 | 19:45:00 | 64.4 | 60.2 | 80.9 | 62.5 | 61.5 | 60.4 | 61.0 | 56.2 | 47.1 | 39.6 |
| 07/08/2015 | 20:00:00 | 63.4 | 59.4 | 81.1 | 61.7 | 60.1 | 59.3 | 59.9 | 55.2 | 46.7 | 39.2 |
| 07/08/2015 | 20:15:00 | 62.8 | 58.7 | 81.1 | 59.8 | 59.2 | 58.8 | 59.2 | 54.8 | 46.0 | 38.5 |
| 07/08/2015 | 20:30:00 | 66.3 | 60.4 | 81.2 | 60.2 | 60.5 | 64.4 | 61.7 | 58.0 | 49.0 | 39.5 |
| 07/08/2015 | 20:45:00 | 64.1 | 60.8 | 81.0 | 61.1 | 60.5 | 62.5 | 59.9 | 55.4 | 47.0 | 39.4 |
| 07/08/2015 | 21:00:00 | 66.0 | 57.8 | 81.1 | 61.2 | 59.3 | 58.1 | 63.3 | 59.0 | 49.3 | 38.8 |
| 07/08/2015 | 21:15:00 | 64.1 | 58.6 | 81.2 | 64.8 | 61.7 | 60.0 | 60.3 | 56.2 | 48.6 | 41.8 |

| Date | Time | L _{Aeq} | L _{A90} | L _{Aeq} | | | | | | | |
|------------|----------|------------------|------------------|------------------|------|------|------|------|------|------|------|
| | | | | 63 | 125 | 250 | 500 | 1k | 2k | 4k | 8k |
| 07/08/2015 | 21:30:00 | 63.4 | 57.3 | 81.1 | 62.6 | 59.5 | 57.3 | 60.1 | 55.9 | 47.5 | 40.0 |
| 07/08/2015 | 21:45:00 | 65.2 | 57.7 | 81.3 | 61.8 | 59.3 | 58.0 | 60.8 | 58.6 | 55.7 | 49.0 |
| 07/08/2015 | 22:00:00 | 63.4 | 58.5 | 81.4 | 59.8 | 59.2 | 58.4 | 60.1 | 55.5 | 46.5 | 39.8 |
| 07/08/2015 | 22:15:00 | 63.6 | 58.3 | 81.7 | 59.4 | 58.6 | 57.4 | 60.5 | 56.0 | 47.4 | 39.8 |
| 07/08/2015 | 22:30:00 | 64.6 | 57.6 | 81.8 | 60.8 | 62.2 | 60.6 | 60.7 | 57.0 | 49.5 | 42.1 |
| 07/08/2015 | 22:45:00 | 64.4 | 57.7 | 81.8 | 61.6 | 62.6 | 59.5 | 60.9 | 56.5 | 47.8 | 40.1 |
| 07/08/2015 | 23:00:00 | 65.8 | 57.8 | 82.0 | 69.4 | 68.1 | 61.8 | 61.3 | 56.2 | 46.9 | 38.9 |
| 07/08/2015 | 23:15:00 | 65.2 | 58.3 | 81.9 | 64.5 | 62.7 | 60.9 | 61.5 | 57.3 | 49.3 | 41.5 |
| 07/08/2015 | 23:30:00 | 64.8 | 56.9 | 82.0 | 64.0 | 62.6 | 60.8 | 61.3 | 56.2 | 47.0 | 39.5 |
| 07/08/2015 | 23:45:00 | 63.0 | 56.4 | 82.0 | 59.0 | 57.9 | 57.4 | 59.8 | 55.3 | 46.2 | 38.2 |
| 08/08/2015 | 00:00:00 | 64.8 | 57.5 | 82.0 | 62.9 | 63.8 | 60.6 | 61.2 | 56.6 | 47.1 | 38.7 |
| 08/08/2015 | 00:15:00 | 63.3 | 55.0 | 82.1 | 58.6 | 57.5 | 56.5 | 60.5 | 55.7 | 45.6 | 37.3 |
| 08/08/2015 | 00:30:00 | 64.9 | 57.6 | 82.3 | 60.5 | 61.4 | 58.5 | 61.8 | 57.5 | 48.2 | 39.9 |
| 08/08/2015 | 00:45:00 | 63.9 | 59.4 | 82.5 | 60.3 | 58.7 | 58.4 | 60.8 | 56.1 | 46.2 | 38.0 |
| 08/08/2015 | 01:00:00 | 65.5 | 57.6 | 83.0 | 58.3 | 57.2 | 56.7 | 61.8 | 59.6 | 53.6 | 43.0 |
| 08/08/2015 | 01:15:00 | 63.5 | 57.4 | 83.5 | 59.6 | 57.4 | 56.3 | 60.4 | 56.1 | 45.8 | 38.2 |
| 08/08/2015 | 01:30:00 | 64.8 | 57.5 | 84.0 | 64.1 | 59.8 | 59.0 | 61.7 | 56.8 | 45.9 | 37.2 |
| 08/08/2015 | 01:45:00 | 64.7 | 57.5 | 84.3 | 62.6 | 62.1 | 57.7 | 61.2 | 57.3 | 48.0 | 39.4 |
| 08/08/2015 | 02:00:00 | 64.9 | 56.1 | 84.6 | 59.7 | 56.1 | 55.5 | 62.1 | 58.2 | 45.0 | 35.5 |
| 08/08/2015 | 02:15:00 | 63.2 | 56.5 | 84.9 | 61.1 | 57.2 | 56.5 | 59.9 | 55.1 | 44.6 | 35.7 |
| 08/08/2015 | 02:30:00 | 64.0 | 57.0 | 85.0 | 63.5 | 60.7 | 58.2 | 60.6 | 55.7 | 45.0 | 36.0 |
| 08/08/2015 | 02:45:00 | 63.8 | 56.6 | 85.2 | 64.4 | 59.8 | 56.7 | 60.6 | 55.1 | 45.2 | 37.3 |
| 08/08/2015 | 03:00:00 | 63.1 | 58.0 | 85.4 | 62.3 | 56.8 | 55.8 | 59.8 | 55.1 | 44.3 | 35.3 |
| 08/08/2015 | 03:15:00 | 65.5 | 57.2 | 85.5 | 62.9 | 57.4 | 56.0 | 61.0 | 59.7 | 54.4 | 43.4 |
| 08/08/2015 | 03:30:00 | 63.8 | 57.4 | 85.5 | 64.8 | 60.1 | 57.1 | 60.4 | 55.4 | 44.3 | 35.7 |
| 08/08/2015 | 03:45:00 | 63.4 | 57.8 | 85.6 | 61.6 | 56.7 | 56.8 | 60.0 | 55.3 | 44.4 | 35.2 |
| 08/08/2015 | 04:00:00 | 63.4 | 57.2 | 85.7 | 62.0 | 56.9 | 56.1 | 60.0 | 55.3 | 44.8 | 36.0 |
| 08/08/2015 | 04:15:00 | 63.7 | 57.8 | 85.9 | 63.4 | 58.0 | 57.0 | 60.2 | 55.4 | 46.1 | 37.7 |
| 08/08/2015 | 04:30:00 | 63.2 | 57.3 | 85.9 | 62.0 | 57.0 | 56.3 | 59.6 | 55.0 | 44.1 | 37.7 |
| 08/08/2015 | 04:45:00 | 63.1 | 57.2 | 86.0 | 62.5 | 57.2 | 56.3 | 59.3 | 54.6 | 45.0 | 45.0 |
| 08/08/2015 | 05:00:00 | 63.3 | 57.4 | 86.0 | 62.6 | 57.2 | 56.5 | 59.7 | 55.2 | 45.4 | 39.1 |
| 08/08/2015 | 05:15:00 | 63.8 | 57.3 | 86.0 | 63.2 | 57.6 | 56.8 | 60.3 | 55.6 | 45.8 | 38.1 |
| 08/08/2015 | 05:30:00 | 63.6 | 57.7 | 86.0 | 62.5 | 57.4 | 57.2 | 59.8 | 55.7 | 46.0 | 37.6 |
| 08/08/2015 | 05:45:00 | 64.4 | 58.1 | 86.0 | 63.8 | 59.0 | 58.4 | 60.5 | 56.8 | 48.8 | 40.4 |
| 08/08/2015 | 06:00:00 | 64.2 | 58.5 | 85.9 | 62.8 | 58.5 | 59.3 | 60.5 | 56.1 | 46.3 | 38.0 |
| 08/08/2015 | 06:15:00 | 64.3 | 58.1 | 86.1 | 63.4 | 58.4 | 57.8 | 60.6 | 56.6 | 47.9 | 41.8 |
| 08/08/2015 | 06:30:00 | 65.0 | 59.6 | 86.2 | 64.8 | 60.3 | 59.5 | 61.1 | 57.0 | 48.5 | 42.3 |
| 08/08/2015 | 06:45:00 | 65.3 | 59.9 | 86.2 | 64.5 | 60.4 | 60.2 | 61.4 | 57.4 | 48.9 | 43.1 |
| 08/08/2015 | 07:00:00 | 65.0 | 59.8 | 86.0 | 64.7 | 60.5 | 59.8 | 61.1 | 57.0 | 48.3 | 40.5 |
| 08/08/2015 | 07:15:00 | 64.9 | 59.8 | 85.7 | 63.7 | 59.6 | 58.7 | 61.3 | 57.2 | 48.1 | 39.9 |
| 08/08/2015 | 07:30:00 | 64.8 | 60.2 | 85.2 | 63.2 | 60.1 | 60.1 | 60.9 | 56.9 | 48.3 | 41.3 |
| 08/08/2015 | 07:45:00 | 63.7 | 58.6 | 84.6 | 61.8 | 58.8 | 58.3 | 59.9 | 56.0 | 47.6 | 40.3 |

| Date | Time | L _{Aeq} | L _{A90} | L _{Aeq} | | | | | | | |
|------------|----------|------------------|------------------|------------------|------|------|------|------|------|------|------|
| | | | | 63 | 125 | 250 | 500 | 1k | 2k | 4k | 8k |
| 08/08/2015 | 08:00:00 | 64.2 | 58.1 | 83.4 | 61.1 | 59.2 | 58.5 | 61.0 | 56.7 | 48.0 | 41.2 |
| 08/08/2015 | 08:15:00 | 64.2 | 58.7 | 82.1 | 61.5 | 60.6 | 59.7 | 60.6 | 56.4 | 48.1 | 40.5 |
| 08/08/2015 | 08:30:00 | 64.2 | 58.3 | 81.6 | 62.0 | 60.0 | 59.8 | 60.7 | 56.7 | 48.5 | 40.1 |
| 08/08/2015 | 08:45:00 | 64.7 | 58.0 | 81.7 | 64.5 | 64.5 | 59.8 | 61.0 | 56.6 | 48.1 | 40.4 |
| 08/08/2015 | 09:00:00 | 63.4 | 57.8 | 81.6 | 62.1 | 59.0 | 57.7 | 60.2 | 55.7 | 47.5 | 41.5 |
| 08/08/2015 | 09:15:00 | 63.2 | 57.0 | 76.6 | 61.2 | 59.5 | 58.2 | 60.1 | 55.5 | 47.6 | 40.8 |
| 08/08/2015 | 09:30:00 | 63.5 | 56.4 | 78.9 | 59.7 | 59.7 | 58.3 | 60.4 | 55.9 | 47.4 | 39.9 |
| 08/08/2015 | 09:45:00 | 62.5 | 57.6 | 75.9 | 59.4 | 58.8 | 57.9 | 59.4 | 54.8 | 46.1 | 39.0 |
| 08/08/2015 | 10:00:00 | 63.5 | 59.4 | 80.2 | 62.4 | 59.8 | 58.8 | 60.0 | 55.8 | 48.0 | 41.1 |
| 08/08/2015 | 10:15:00 | 65.8 | 59.6 | 80.8 | 62.2 | 61.9 | 60.3 | 61.8 | 59.0 | 53.7 | 47.6 |
| 08/08/2015 | 10:30:00 | 63.1 | 58.1 | 81.0 | 60.8 | 59.6 | 57.8 | 59.5 | 55.3 | 48.0 | 44.5 |
| 08/08/2015 | 10:45:00 | 63.8 | 59.6 | 80.4 | 60.9 | 60.5 | 59.7 | 60.3 | 55.6 | 47.9 | 44.5 |
| 08/08/2015 | 11:00:00 | 64.1 | 57.8 | 80.1 | 65.3 | 63.3 | 60.9 | 59.9 | 55.2 | 47.9 | 44.5 |
| 08/08/2015 | 11:15:00 | 63.8 | 57.7 | 79.6 | 61.9 | 61.2 | 60.0 | 59.9 | 55.9 | 48.7 | 41.3 |
| 08/08/2015 | 11:30:00 | 63.8 | 58.8 | 78.0 | 62.3 | 61.1 | 59.4 | 60.5 | 55.7 | 48.2 | 41.5 |
| 08/08/2015 | 11:45:00 | 65.0 | 57.5 | 76.7 | 64.9 | 65.1 | 62.5 | 61.0 | 55.4 | 47.9 | 41.8 |
| 08/08/2015 | 12:00:00 | 63.6 | 56.3 | 75.6 | 64.7 | 62.5 | 58.9 | 60.1 | 55.6 | 47.6 | 40.1 |
| 08/08/2015 | 12:15:00 | 64.1 | 57.8 | 73.2 | 61.7 | 61.8 | 60.7 | 60.7 | 56.1 | 49.0 | 42.7 |
| 08/08/2015 | 12:30:00 | 64.8 | 58.2 | 80.7 | 61.8 | 60.4 | 59.1 | 60.4 | 58.4 | 53.8 | 44.2 |
| 08/08/2015 | 12:45:00 | 63.8 | 58.6 | 81.2 | 64.3 | 61.5 | 59.2 | 59.9 | 56.1 | 49.4 | 42.7 |
| 08/08/2015 | 13:00:00 | 63.4 | 59.0 | 79.5 | 62.3 | 60.9 | 59.5 | 59.9 | 55.1 | 47.1 | 39.5 |
| 08/08/2015 | 13:15:00 | 65.3 | 57.0 | 76.3 | 62.2 | 60.5 | 58.2 | 61.3 | 59.3 | 54.3 | 44.7 |
| 08/08/2015 | 13:30:00 | 64.2 | 57.2 | 74.1 | 66.9 | 63.2 | 59.8 | 60.5 | 56.0 | 48.4 | 41.6 |
| 08/08/2015 | 13:45:00 | 64.0 | 57.5 | 77.2 | 61.0 | 59.7 | 58.3 | 59.9 | 57.0 | 53.6 | 44.0 |
| 08/08/2015 | 14:00:00 | 63.4 | 57.7 | 77.0 | 61.6 | 60.3 | 58.9 | 60.0 | 55.7 | 48.3 | 41.2 |
| 08/08/2015 | 14:15:00 | 65.0 | 58.7 | 80.3 | 64.0 | 60.9 | 58.2 | 61.3 | 58.1 | 53.2 | 45.2 |
| 08/08/2015 | 14:30:00 | 62.6 | 56.8 | 77.6 | 60.9 | 60.4 | 58.6 | 59.1 | 54.4 | 46.3 | 39.4 |
| 08/08/2015 | 14:45:00 | 63.0 | 58.6 | 78.9 | 63.0 | 60.3 | 58.0 | 59.5 | 55.2 | 47.6 | 41.0 |
| 08/08/2015 | 15:00:00 | 62.7 | 58.3 | 78.2 | 61.6 | 60.6 | 58.2 | 59.2 | 54.7 | 47.6 | 41.5 |
| 08/08/2015 | 15:15:00 | 62.7 | 59.0 | 78.0 | 61.3 | 59.8 | 58.3 | 59.3 | 54.7 | 47.2 | 39.7 |
| 08/08/2015 | 15:30:00 | 62.4 | 56.9 | 65.3 | 60.0 | 59.0 | 56.4 | 59.4 | 55.1 | 47.4 | 39.3 |
| 08/08/2015 | 15:45:00 | 63.3 | 58.6 | 80.6 | 61.0 | 59.5 | 58.7 | 59.7 | 55.6 | 48.8 | 45.2 |
| 08/08/2015 | 16:00:00 | 62.9 | 58.2 | 81.4 | 60.5 | 59.3 | 59.2 | 59.4 | 54.3 | 46.3 | 37.9 |
| 08/08/2015 | 16:15:00 | 63.3 | 57.2 | 79.7 | 61.2 | 59.1 | 58.1 | 59.9 | 55.2 | 51.6 | 39.6 |
| 08/08/2015 | 16:30:00 | 63.3 | 55.6 | 67.1 | 59.7 | 59.0 | 57.4 | 60.9 | 55.4 | 46.2 | 38.7 |
| 08/08/2015 | 16:45:00 | 62.2 | 56.5 | 73.3 | 58.6 | 58.3 | 56.8 | 59.4 | 54.6 | 46.0 | 39.4 |
| 08/08/2015 | 17:00:00 | 63.5 | 58.5 | 81.1 | 64.2 | 61.9 | 58.6 | 60.1 | 55.2 | 47.1 | 40.5 |
| 08/08/2015 | 17:15:00 | 62.8 | 57.7 | 81.5 | 61.1 | 59.0 | 57.3 | 59.6 | 54.7 | 46.5 | 38.4 |
| 08/08/2015 | 17:30:00 | 63.9 | 58.1 | 81.4 | 66.6 | 61.7 | 59.6 | 60.0 | 55.3 | 47.3 | 39.7 |
| 08/08/2015 | 17:45:00 | 63.2 | 58.4 | 78.5 | 61.1 | 62.0 | 58.4 | 59.8 | 55.3 | 47.6 | 39.6 |
| 08/08/2015 | 18:00:00 | 63.0 | 57.3 | 80.4 | 61.0 | 59.1 | 57.8 | 59.9 | 55.1 | 46.1 | 39.4 |
| 08/08/2015 | 18:15:00 | 65.0 | 57.6 | 81.3 | 61.5 | 59.0 | 57.5 | 60.8 | 58.2 | 55.5 | 47.8 |

| Date | Time | L _{Aeq} | L _{A90} | L _{Aeq} | | | | | | | |
|------------|----------|------------------|------------------|------------------|------|------|------|------|------|------|------|
| | | | | 63 | 125 | 250 | 500 | 1k | 2k | 4k | 8k |
| 08/08/2015 | 18:30:00 | 63.7 | 58.3 | 81.2 | 61.7 | 61.1 | 58.9 | 60.2 | 55.8 | 48.3 | 41.0 |
| 08/08/2015 | 18:45:00 | 63.2 | 58.6 | 81.2 | 62.6 | 59.5 | 58.8 | 59.6 | 55.3 | 47.2 | 39.3 |
| 08/08/2015 | 19:00:00 | 64.6 | 58.3 | 81.2 | 62.4 | 60.0 | 59.6 | 61.0 | 56.8 | 51.5 | 45.5 |
| 08/08/2015 | 19:15:00 | 63.0 | 58.1 | 81.1 | 61.9 | 59.2 | 57.2 | 59.9 | 55.1 | 46.0 | 38.7 |
| 08/08/2015 | 19:30:00 | 63.6 | 58.2 | 81.0 | 62.6 | 61.7 | 58.7 | 60.2 | 55.3 | 46.7 | 39.0 |
| 08/08/2015 | 19:45:00 | 63.0 | 58.6 | 81.1 | 60.9 | 59.4 | 57.9 | 59.5 | 55.3 | 47.6 | 40.1 |
| 08/08/2015 | 20:00:00 | 65.3 | 58.3 | 81.1 | 60.5 | 59.4 | 58.2 | 61.4 | 58.7 | 55.0 | 45.9 |
| 08/08/2015 | 20:15:00 | 66.9 | 58.7 | 81.1 | 59.1 | 59.0 | 59.0 | 63.3 | 61.8 | 48.9 | 39.4 |
| 08/08/2015 | 20:30:00 | 66.6 | 57.4 | 81.2 | 61.2 | 59.6 | 58.4 | 63.6 | 60.4 | 53.0 | 43.9 |
| 08/08/2015 | 20:45:00 | 62.9 | 58.5 | 81.1 | 62.0 | 59.3 | 59.5 | 59.2 | 54.3 | 46.4 | 38.8 |
| 08/08/2015 | 21:00:00 | 64.5 | 57.1 | 81.1 | 59.9 | 58.4 | 57.5 | 61.3 | 57.8 | 50.1 | 40.1 |
| 08/08/2015 | 21:15:00 | 62.8 | 58.2 | 81.1 | 60.1 | 58.9 | 57.3 | 59.8 | 54.7 | 45.9 | 38.3 |
| 08/08/2015 | 21:30:00 | 64.7 | 57.1 | 81.2 | 61.4 | 62.2 | 60.8 | 60.2 | 58.0 | 49.9 | 41.7 |
| 08/08/2015 | 21:45:00 | 64.9 | 58.4 | 81.1 | 61.5 | 61.6 | 59.9 | 61.2 | 58.2 | 47.8 | 39.1 |
| 08/08/2015 | 22:00:00 | 63.8 | 58.2 | 81.0 | 59.4 | 58.5 | 57.8 | 60.6 | 56.6 | 49.0 | 40.8 |
| 08/08/2015 | 22:15:00 | 63.5 | 58.5 | 81.1 | 59.1 | 58.8 | 57.7 | 60.4 | 56.2 | 47.1 | 38.8 |
| 08/08/2015 | 22:30:00 | 63.4 | 58.5 | 81.1 | 59.0 | 58.9 | 57.5 | 60.4 | 55.7 | 46.5 | 38.5 |
| 08/08/2015 | 22:45:00 | 65.6 | 57.0 | 81.1 | 59.5 | 58.6 | 61.9 | 61.8 | 57.8 | 48.9 | 39.0 |
| 08/08/2015 | 23:00:00 | 62.9 | 55.6 | 81.1 | 58.7 | 57.9 | 56.6 | 59.9 | 55.4 | 46.3 | 37.8 |
| 08/08/2015 | 23:15:00 | 64.0 | 57.4 | 81.1 | 62.4 | 59.8 | 58.2 | 60.8 | 56.9 | 46.9 | 38.0 |
| 08/08/2015 | 23:30:00 | 64.5 | 55.9 | 81.1 | 59.1 | 58.2 | 57.5 | 61.3 | 57.9 | 49.9 | 40.4 |
| 08/08/2015 | 23:45:00 | 64.5 | 58.6 | 81.3 | 61.8 | 59.0 | 58.2 | 61.4 | 57.4 | 48.8 | 41.2 |
| 09/08/2015 | 00:00:00 | 63.8 | 57.2 | 81.3 | 60.0 | 59.5 | 58.7 | 60.6 | 56.3 | 47.6 | 39.9 |
| 09/08/2015 | 00:15:00 | 64.3 | 58.7 | 81.2 | 64.1 | 60.2 | 59.2 | 61.2 | 56.2 | 48.1 | 37.3 |
| 09/08/2015 | 00:30:00 | 63.8 | 57.5 | 81.2 | 60.0 | 58.4 | 57.7 | 60.9 | 56.4 | 47.5 | 42.6 |
| 09/08/2015 | 00:45:00 | 67.1 | 57.3 | 81.3 | 60.3 | 60.0 | 57.3 | 62.9 | 61.5 | 57.2 | 49.0 |
| 09/08/2015 | 01:00:00 | 63.6 | 56.3 | 81.4 | 58.3 | 57.6 | 56.7 | 61.0 | 56.0 | 45.2 | 36.3 |
| 09/08/2015 | 01:15:00 | 63.0 | 55.5 | 81.5 | 58.8 | 57.0 | 56.3 | 60.2 | 55.5 | 45.5 | 37.4 |
| 09/08/2015 | 01:30:00 | 63.1 | 56.9 | 81.6 | 57.4 | 57.0 | 56.0 | 60.5 | 55.2 | 44.7 | 36.7 |
| 09/08/2015 | 01:45:00 | 62.9 | 56.6 | 81.8 | 57.0 | 56.4 | 55.9 | 60.2 | 55.2 | 44.6 | 35.5 |
| 09/08/2015 | 02:00:00 | 62.9 | 54.3 | 82.2 | 57.8 | 57.0 | 55.8 | 60.2 | 55.0 | 43.5 | 34.4 |
| 09/08/2015 | 02:15:00 | 63.1 | 56.7 | 84.8 | 60.6 | 57.0 | 55.7 | 60.1 | 55.0 | 43.8 | 35.3 |
| 09/08/2015 | 02:30:00 | 67.9 | 58.0 | 85.0 | 59.9 | 59.6 | 62.3 | 64.3 | 61.4 | 51.4 | 47.5 |
| 09/08/2015 | 02:45:00 | 63.8 | 56.5 | 85.2 | 61.9 | 59.4 | 57.8 | 60.6 | 55.4 | 43.9 | 35.4 |
| 09/08/2015 | 03:00:00 | 62.8 | 57.1 | 85.3 | 59.0 | 55.9 | 55.3 | 59.6 | 54.7 | 43.4 | 34.9 |
| 09/08/2015 | 03:15:00 | 63.8 | 57.5 | 85.5 | 59.7 | 56.6 | 56.2 | 60.8 | 56.0 | 44.6 | 34.8 |
| 09/08/2015 | 03:30:00 | 63.9 | 57.5 | 85.7 | 60.0 | 56.7 | 56.5 | 60.9 | 55.9 | 44.8 | 35.7 |
| 09/08/2015 | 03:45:00 | 63.7 | 57.7 | 86.0 | 60.8 | 56.1 | 55.7 | 60.5 | 55.7 | 44.3 | 35.0 |
| 09/08/2015 | 04:00:00 | 63.3 | 57.4 | 86.1 | 60.3 | 55.4 | 55.2 | 60.0 | 55.1 | 43.7 | 34.8 |
| 09/08/2015 | 04:15:00 | 63.8 | 57.8 | 86.1 | 61.3 | 56.9 | 55.9 | 60.6 | 55.8 | 44.8 | 35.8 |
| 09/08/2015 | 04:30:00 | 62.7 | 56.5 | 85.5 | 60.2 | 55.7 | 55.1 | 59.4 | 54.5 | 44.0 | 35.0 |
| 09/08/2015 | 04:45:00 | 62.7 | 55.9 | 84.5 | 60.1 | 55.8 | 55.2 | 59.5 | 54.9 | 44.1 | 34.7 |

| Date | Time | L _{Aeq} | L _{A90} | L _{Aeq} | | | | | | | |
|------------|----------|------------------|------------------|------------------|------|------|------|------|------|------|------|
| | | | | 63 | 125 | 250 | 500 | 1k | 2k | 4k | 8k |
| 09/08/2015 | 05:00:00 | 62.8 | 55.9 | 84.4 | 60.1 | 55.8 | 55.5 | 59.8 | 54.9 | 44.0 | 35.2 |
| 09/08/2015 | 05:15:00 | 63.0 | 55.7 | 84.4 | 60.5 | 56.5 | 55.7 | 59.7 | 55.5 | 46.1 | 38.6 |
| 09/08/2015 | 05:30:00 | 63.5 | 55.9 | 84.5 | 60.9 | 56.8 | 56.0 | 60.3 | 56.1 | 46.5 | 37.5 |
| 09/08/2015 | 05:45:00 | 62.8 | 56.2 | 84.5 | 60.5 | 56.0 | 55.2 | 59.7 | 54.8 | 44.5 | 36.4 |
| 09/08/2015 | 06:00:00 | 64.1 | 57.4 | 84.5 | 61.3 | 57.1 | 56.8 | 60.9 | 56.7 | 47.1 | 37.8 |
| 09/08/2015 | 06:15:00 | 64.0 | 57.2 | 84.3 | 62.0 | 59.1 | 57.8 | 60.5 | 56.5 | 48.0 | 39.4 |
| 09/08/2015 | 06:30:00 | 63.9 | 56.5 | 83.8 | 61.7 | 58.1 | 58.3 | 60.6 | 55.8 | 46.2 | 40.2 |
| 09/08/2015 | 06:45:00 | 63.4 | 55.0 | 83.3 | 60.0 | 57.2 | 56.5 | 60.4 | 55.8 | 46.1 | 37.7 |
| 09/08/2015 | 07:00:00 | 63.6 | 55.4 | 83.1 | 59.6 | 56.6 | 56.8 | 60.7 | 56.0 | 46.5 | 37.7 |
| 09/08/2015 | 07:15:00 | 63.9 | 56.1 | 83.0 | 60.4 | 59.0 | 57.1 | 60.8 | 56.5 | 47.3 | 38.5 |
| 09/08/2015 | 07:30:00 | 63.6 | 56.2 | 82.6 | 59.7 | 58.0 | 57.3 | 60.6 | 56.1 | 46.9 | 38.8 |
| 09/08/2015 | 07:45:00 | 64.5 | 57.3 | 82.1 | 59.3 | 60.9 | 60.1 | 60.4 | 58.0 | 47.6 | 41.2 |
| 09/08/2015 | 08:00:00 | 62.5 | 54.6 | 81.7 | 59.3 | 57.4 | 56.6 | 59.3 | 54.7 | 45.4 | 36.9 |
| 09/08/2015 | 08:15:00 | 62.6 | 54.4 | 81.5 | 59.8 | 58.5 | 56.6 | 59.4 | 54.8 | 45.6 | 38.7 |
| 09/08/2015 | 08:30:00 | 63.6 | 56.0 | 81.5 | 61.0 | 61.5 | 57.6 | 60.3 | 55.9 | 46.7 | 37.9 |
| 09/08/2015 | 08:45:00 | 63.0 | 55.3 | 79.1 | 58.8 | 57.7 | 56.9 | 60.2 | 55.6 | 46.5 | 39.9 |
| 09/08/2015 | 09:00:00 | 63.4 | 55.6 | 80.7 | 58.1 | 58.3 | 57.1 | 60.7 | 55.7 | 45.4 | 36.4 |
| 09/08/2015 | 09:15:00 | 63.4 | 55.4 | 80.4 | 59.0 | 58.1 | 56.9 | 60.6 | 56.0 | 46.7 | 37.7 |
| 09/08/2015 | 09:30:00 | 63.6 | 55.2 | 81.4 | 59.8 | 58.5 | 57.0 | 60.8 | 55.8 | 46.3 | 37.7 |
| 09/08/2015 | 09:45:00 | 63.9 | 57.1 | 81.4 | 61.2 | 59.5 | 58.7 | 60.8 | 56.1 | 47.2 | 39.9 |
| 09/08/2015 | 10:00:00 | 63.6 | 58.1 | 81.1 | 59.3 | 58.8 | 58.5 | 60.4 | 55.9 | 47.2 | 38.3 |
| 09/08/2015 | 10:15:00 | 63.2 | 57.7 | 81.1 | 63.1 | 59.5 | 58.6 | 59.9 | 54.9 | 45.9 | 37.9 |
| 09/08/2015 | 10:30:00 | 63.3 | 54.8 | 81.0 | 59.4 | 58.6 | 57.6 | 60.1 | 55.7 | 47.8 | 38.8 |
| 09/08/2015 | 10:45:00 | 63.3 | 57.6 | 81.0 | 59.5 | 58.7 | 57.3 | 60.4 | 55.5 | 46.6 | 37.7 |
| 09/08/2015 | 11:00:00 | 63.0 | 57.5 | 81.0 | 59.2 | 58.6 | 57.1 | 60.1 | 55.1 | 46.2 | 40.7 |
| 09/08/2015 | 11:15:00 | 62.7 | 55.8 | 80.9 | 59.3 | 58.3 | 56.9 | 59.7 | 54.6 | 45.5 | 37.0 |
| 09/08/2015 | 11:30:00 | 62.8 | 58.7 | 80.7 | 59.9 | 59.0 | 57.2 | 59.7 | 54.9 | 46.3 | 38.1 |
| 09/08/2015 | 11:45:00 | 63.8 | 58.2 | 80.1 | 60.9 | 60.0 | 59.1 | 60.4 | 56.3 | 48.3 | 39.6 |
| 09/08/2015 | 12:00:00 | 62.2 | 56.7 | 79.6 | 60.9 | 58.8 | 56.7 | 59.2 | 54.1 | 45.6 | 36.8 |
| 09/08/2015 | 12:15:00 | 62.4 | 56.6 | 76.0 | 59.9 | 59.5 | 57.5 | 59.5 | 54.2 | 45.3 | 37.1 |
| 09/08/2015 | 12:30:00 | 61.5 | 56.1 | 72.8 | 61.2 | 58.9 | 56.2 | 58.5 | 53.8 | 45.2 | 37.4 |
| 09/08/2015 | 12:45:00 | 64.9 | 57.2 | 66.4 | 59.0 | 58.3 | 56.4 | 62.2 | 58.6 | 49.9 | 40.9 |
| 09/08/2015 | 13:00:00 | 62.3 | 56.1 | 66.2 | 59.5 | 59.3 | 56.6 | 59.6 | 54.5 | 45.8 | 38.8 |
| 09/08/2015 | 13:15:00 | 68.8 | 55.9 | 66.5 | 60.3 | 60.4 | 57.6 | 65.1 | 64.5 | 48.5 | 37.1 |
| 09/08/2015 | 13:30:00 | 62.5 | 57.1 | 76.9 | 59.2 | 58.8 | 56.9 | 59.6 | 54.6 | 46.4 | 38.4 |
| 09/08/2015 | 13:45:00 | 65.6 | 58.6 | 80.2 | 62.3 | 59.5 | 59.6 | 62.1 | 58.7 | 54.1 | 43.3 |
| 09/08/2015 | 14:00:00 | 63.9 | 59.2 | 80.9 | 62.5 | 60.3 | 60.7 | 60.3 | 55.7 | 46.9 | 37.4 |
| 09/08/2015 | 14:15:00 | 63.3 | 58.2 | 81.2 | 63.0 | 60.4 | 58.0 | 60.1 | 54.9 | 45.8 | 37.4 |
| 09/08/2015 | 14:30:00 | 62.9 | 57.1 | 81.4 | 61.2 | 60.8 | 57.5 | 59.6 | 54.5 | 45.2 | 37.9 |
| 09/08/2015 | 14:45:00 | 64.5 | 58.3 | 79.7 | 61.2 | 62.2 | 61.0 | 60.9 | 55.6 | 46.5 | 37.5 |
| 09/08/2015 | 15:00:00 | 63.1 | 56.8 | 78.8 | 62.0 | 59.8 | 57.2 | 60.2 | 55.0 | 45.3 | 37.0 |
| 09/08/2015 | 15:15:00 | 65.9 | 58.6 | 78.8 | 60.3 | 60.6 | 58.5 | 62.6 | 59.8 | 52.7 | 40.0 |

| Date | Time | L _{Aeq} | L _{A90} | L _{Aeq} | | | | | | | |
|------------|----------|------------------|------------------|------------------|------|------|------|------|------|------|------|
| | | | | 63 | 125 | 250 | 500 | 1k | 2k | 4k | 8k |
| 09/08/2015 | 15:30:00 | 62.3 | 57.3 | 71.4 | 59.6 | 58.4 | 56.7 | 59.7 | 54.4 | 45.7 | 36.7 |
| 09/08/2015 | 15:45:00 | 62.3 | 54.6 | 70.8 | 59.8 | 59.4 | 57.0 | 59.6 | 54.3 | 45.4 | 36.4 |
| 09/08/2015 | 16:00:00 | 62.9 | 56.6 | 76.3 | 60.5 | 60.4 | 57.7 | 60.0 | 54.8 | 45.5 | 35.9 |
| 09/08/2015 | 16:15:00 | 65.4 | 57.3 | 78.3 | 60.9 | 59.2 | 57.9 | 62.0 | 58.9 | 53.4 | 43.0 |
| 09/08/2015 | 16:30:00 | 62.4 | 56.5 | 76.1 | 59.8 | 58.7 | 57.0 | 59.6 | 54.5 | 45.7 | 37.1 |
| 09/08/2015 | 16:45:00 | 62.6 | 55.2 | 66.2 | 58.4 | 58.2 | 56.8 | 60.2 | 54.7 | 45.1 | 36.2 |
| 09/08/2015 | 17:00:00 | 65.9 | 56.9 | 65.7 | 61.7 | 59.6 | 56.6 | 62.7 | 60.3 | 48.5 | 41.1 |
| 09/08/2015 | 17:15:00 | 62.8 | 56.4 | 66.4 | 61.0 | 58.6 | 56.9 | 60.0 | 55.5 | 47.0 | 38.1 |
| 09/08/2015 | 17:30:00 | 62.8 | 57.4 | 75.3 | 59.7 | 58.6 | 57.2 | 60.1 | 54.9 | 45.7 | 39.0 |
| 09/08/2015 | 17:45:00 | 62.8 | 56.5 | 71.1 | 60.2 | 60.1 | 57.8 | 59.9 | 54.9 | 46.2 | 38.3 |
| 09/08/2015 | 18:00:00 | 63.3 | 57.8 | 74.4 | 64.7 | 63.0 | 59.5 | 59.7 | 54.8 | 45.9 | 38.7 |
| 09/08/2015 | 18:15:00 | 65.0 | 58.1 | 81.3 | 61.9 | 62.0 | 59.3 | 61.9 | 57.7 | 46.5 | 44.2 |
| 09/08/2015 | 18:30:00 | 63.4 | 57.1 | 80.9 | 62.6 | 60.1 | 57.7 | 60.3 | 55.5 | 47.0 | 39.7 |
| 09/08/2015 | 18:45:00 | 63.5 | 56.9 | 81.0 | 61.3 | 58.9 | 57.8 | 60.0 | 56.2 | 48.9 | 41.2 |
| 09/08/2015 | 19:00:00 | 63.7 | 57.6 | 80.4 | 64.0 | 60.5 | 58.6 | 60.7 | 55.3 | 45.6 | 39.6 |
| 09/08/2015 | 19:15:00 | 63.8 | 56.8 | 80.0 | 61.3 | 60.0 | 58.0 | 60.9 | 56.2 | 47.1 | 39.8 |
| 09/08/2015 | 19:30:00 | 63.4 | 57.1 | 80.0 | 61.5 | 60.1 | 57.4 | 60.1 | 56.1 | 47.7 | 39.8 |
| 09/08/2015 | 19:45:00 | 63.7 | 58.3 | 80.2 | 61.2 | 59.1 | 57.7 | 60.4 | 56.6 | 49.2 | 41.9 |
| 09/08/2015 | 20:00:00 | 63.0 | 55.9 | 80.2 | 61.2 | 60.7 | 57.6 | 59.7 | 54.8 | 46.3 | 39.0 |
| 09/08/2015 | 20:15:00 | 64.0 | 58.2 | 80.1 | 59.0 | 58.6 | 58.0 | 61.3 | 56.5 | 46.4 | 38.6 |
| 09/08/2015 | 20:30:00 | 63.0 | 59.2 | 80.2 | 59.0 | 59.1 | 58.7 | 59.5 | 55.1 | 47.2 | 40.7 |
| 09/08/2015 | 20:45:00 | 64.1 | 57.3 | 80.1 | 61.4 | 60.2 | 59.8 | 60.4 | 56.6 | 49.8 | 42.7 |
| 09/08/2015 | 21:00:00 | 65.2 | 58.3 | 80.1 | 61.0 | 58.3 | 56.8 | 61.1 | 60.0 | 52.5 | 42.8 |
| 09/08/2015 | 21:15:00 | 63.1 | 56.9 | 80.1 | 59.0 | 58.6 | 57.1 | 60.1 | 55.5 | 47.2 | 40.2 |
| 09/08/2015 | 21:30:00 | 62.7 | 56.4 | 80.3 | 60.0 | 58.2 | 56.6 | 59.7 | 55.1 | 46.4 | 39.4 |
| 09/08/2015 | 21:45:00 | 63.5 | 58.2 | 80.3 | 63.5 | 59.0 | 57.3 | 60.6 | 55.7 | 46.7 | 38.4 |
| 09/08/2015 | 22:00:00 | 63.8 | 58.1 | 80.3 | 59.5 | 58.4 | 56.5 | 60.6 | 56.7 | 50.2 | 42.6 |
| 09/08/2015 | 22:15:00 | 63.3 | 57.3 | 80.3 | 61.3 | 61.9 | 58.5 | 59.9 | 55.3 | 46.6 | 39.0 |
| 09/08/2015 | 22:30:00 | 63.3 | 57.3 | 80.3 | 61.3 | 61.8 | 58.3 | 59.9 | 55.1 | 47.2 | 39.9 |
| 09/08/2015 | 22:45:00 | 63.6 | 58.5 | 80.4 | 60.7 | 59.6 | 57.5 | 60.7 | 56.0 | 46.8 | 38.4 |
| 09/08/2015 | 23:00:00 | 63.1 | 57.6 | 80.5 | 59.6 | 58.4 | 56.8 | 60.2 | 55.4 | 46.5 | 39.3 |
| 09/08/2015 | 23:15:00 | 63.3 | 56.5 | 80.5 | 59.0 | 58.3 | 58.4 | 60.2 | 55.5 | 47.1 | 39.0 |
| 09/08/2015 | 23:30:00 | 63.3 | 54.9 | 80.6 | 58.5 | 58.6 | 58.8 | 60.2 | 55.3 | 45.8 | 38.7 |
| 09/08/2015 | 23:45:00 | 63.1 | 57.4 | 80.8 | 58.7 | 58.2 | 58.5 | 59.8 | 55.3 | 47.0 | 38.9 |
| 10/08/2015 | 00:00:00 | 63.3 | 57.0 | 81.0 | 58.0 | 58.1 | 59.2 | 60.2 | 55.1 | 44.7 | 36.3 |
| 10/08/2015 | 00:15:00 | 63.6 | 56.9 | 81.2 | 57.9 | 57.8 | 58.0 | 60.6 | 55.9 | 45.9 | 37.6 |
| 10/08/2015 | 00:30:00 | 63.9 | 56.0 | 81.1 | 61.3 | 59.4 | 57.9 | 60.9 | 56.3 | 47.0 | 38.9 |
| 10/08/2015 | 00:45:00 | 62.9 | 54.3 | 80.9 | 58.3 | 57.6 | 56.4 | 60.1 | 55.3 | 45.7 | 38.0 |
| 10/08/2015 | 01:00:00 | 61.8 | 53.0 | 80.9 | 56.6 | 55.8 | 54.6 | 59.1 | 54.3 | 43.9 | 35.6 |
| 10/08/2015 | 01:15:00 | 61.7 | 53.1 | 80.9 | 56.7 | 55.3 | 54.9 | 59.0 | 54.0 | 43.6 | 36.0 |
| 10/08/2015 | 01:30:00 | 61.7 | 53.8 | 80.9 | 56.4 | 55.7 | 56.3 | 58.7 | 53.9 | 43.4 | 34.9 |
| 10/08/2015 | 01:45:00 | 61.8 | 52.7 | 80.9 | 56.6 | 55.6 | 57.1 | 58.7 | 53.8 | 43.4 | 35.3 |

| Date | Time | L _{Aeq} | L _{A90} | L _{Aeq} | | | | | | | |
|------------|----------|------------------|------------------|------------------|------|------|------|------|------|------|------|
| | | | | 63 | 125 | 250 | 500 | 1k | 2k | 4k | 8k |
| 10/08/2015 | 02:00:00 | 60.5 | 52.4 | 81.0 | 55.4 | 54.6 | 54.0 | 57.4 | 52.5 | 42.1 | 34.2 |
| 10/08/2015 | 02:15:00 | 61.0 | 53.0 | 80.9 | 55.8 | 55.3 | 56.0 | 57.7 | 52.9 | 43.8 | 35.2 |
| 10/08/2015 | 02:30:00 | 60.4 | 52.6 | 81.0 | 55.2 | 53.8 | 54.4 | 57.3 | 52.3 | 41.9 | 33.7 |
| 10/08/2015 | 02:45:00 | 59.4 | 52.0 | 80.9 | 54.8 | 53.2 | 52.2 | 56.3 | 51.5 | 41.2 | 33.3 |
| 10/08/2015 | 03:00:00 | 60.2 | 52.2 | 80.9 | 55.4 | 54.4 | 54.2 | 57.0 | 52.1 | 42.9 | 34.7 |
| 10/08/2015 | 03:15:00 | 60.7 | 52.3 | 81.0 | 55.6 | 54.6 | 54.5 | 57.8 | 52.7 | 43.0 | 35.1 |
| 10/08/2015 | 03:30:00 | 59.2 | 52.1 | 81.0 | 55.2 | 52.9 | 53.3 | 55.8 | 50.8 | 41.0 | 33.4 |
| 10/08/2015 | 03:45:00 | 60.0 | 52.0 | 81.0 | 55.2 | 52.9 | 53.1 | 56.7 | 52.1 | 44.3 | 40.7 |
| 10/08/2015 | 04:00:00 | 60.6 | 52.3 | 80.9 | 56.7 | 54.6 | 54.3 | 57.6 | 52.6 | 43.3 | 36.3 |
| 10/08/2015 | 04:15:00 | 60.4 | 52.1 | 80.8 | 56.1 | 55.7 | 54.9 | 57.0 | 52.4 | 43.2 | 34.7 |
| 10/08/2015 | 04:30:00 | 60.7 | 52.8 | 80.8 | 56.3 | 54.8 | 54.9 | 57.4 | 53.0 | 43.6 | 35.5 |
| 10/08/2015 | 04:45:00 | 61.4 | 52.8 | 80.8 | 56.6 | 56.3 | 56.2 | 58.2 | 53.4 | 44.3 | 36.3 |
| 10/08/2015 | 05:00:00 | 62.3 | 55.0 | 80.8 | 57.4 | 57.1 | 58.3 | 59.0 | 54.1 | 45.3 | 38.0 |
| 10/08/2015 | 05:15:00 | 62.7 | 55.2 | 80.9 | 57.8 | 57.4 | 57.9 | 59.5 | 54.9 | 45.6 | 37.7 |
| 10/08/2015 | 05:30:00 | 63.0 | 52.7 | 80.9 | 57.7 | 57.1 | 56.9 | 59.7 | 55.8 | 48.1 | 40.4 |
| 10/08/2015 | 05:45:00 | 64.2 | 57.3 | 80.8 | 59.6 | 59.0 | 59.8 | 61.0 | 56.5 | 47.8 | 40.0 |
| 10/08/2015 | 06:00:00 | 64.6 | 57.2 | 80.7 | 60.0 | 60.0 | 60.6 | 61.3 | 57.0 | 47.9 | 40.6 |
| 10/08/2015 | 06:15:00 | 64.0 | 57.5 | 80.7 | 59.8 | 59.3 | 58.6 | 60.8 | 56.5 | 48.0 | 41.3 |
| 10/08/2015 | 06:30:00 | 65.3 | 59.2 | 80.6 | 61.6 | 60.5 | 60.2 | 61.7 | 58.4 | 51.5 | 44.0 |
| 10/08/2015 | 06:45:00 | 64.3 | 56.6 | 80.6 | 60.5 | 59.5 | 58.6 | 61.2 | 57.0 | 49.1 | 42.1 |
| 10/08/2015 | 07:00:00 | 64.0 | 59.3 | 80.6 | 63.5 | 60.6 | 59.1 | 60.2 | 56.6 | 49.3 | 43.1 |
| 10/08/2015 | 07:15:00 | 64.6 | 59.7 | 80.5 | 63.5 | 61.2 | 61.0 | 60.4 | 57.0 | 50.2 | 44.0 |
| 10/08/2015 | 07:30:00 | 71.4 | 59.7 | 80.4 | 65.5 | 62.0 | 62.5 | 70.3 | 59.4 | 51.4 | 44.5 |
| 10/08/2015 | 07:45:00 | 63.7 | 58.6 | 80.3 | 64.8 | 61.5 | 59.2 | 59.5 | 56.2 | 49.7 | 44.9 |
| 10/08/2015 | 08:00:00 | 63.1 | 58.4 | 80.0 | 62.2 | 60.9 | 60.4 | 58.5 | 55.0 | 48.8 | 43.1 |
| 10/08/2015 | 08:15:00 | 65.8 | 60.4 | 80.1 | 64.4 | 62.3 | 61.3 | 62.1 | 58.0 | 51.9 | 47.4 |
| 10/08/2015 | 08:30:00 | 64.9 | 59.3 | 80.1 | 65.1 | 62.3 | 61.1 | 60.4 | 57.6 | 51.4 | 46.7 |
| 10/08/2015 | 08:45:00 | 66.4 | 61.0 | 80.1 | 64.8 | 62.7 | 62.4 | 61.6 | 58.8 | 55.8 | 51.7 |
| 10/08/2015 | 09:00:00 | 67.1 | 58.6 | 79.9 | 60.1 | 59.7 | 62.4 | 63.8 | 60.2 | 49.5 | 44.6 |
| 10/08/2015 | 09:15:00 | 63.9 | 58.6 | 80.8 | 63.1 | 60.9 | 60.7 | 59.7 | 55.6 | 48.8 | 42.5 |
| 10/08/2015 | 09:30:00 | 64.3 | 59.5 | 81.4 | 63.6 | 63.0 | 60.7 | 59.6 | 56.6 | 50.8 | 45.3 |
| 10/08/2015 | 09:45:00 | 64.3 | 60.4 | 81.4 | 63.7 | 62.0 | 61.4 | 59.4 | 56.7 | 50.2 | 43.2 |
| 10/08/2015 | 10:00:00 | 64.0 | 60.0 | 81.4 | 62.6 | 61.7 | 60.5 | 59.6 | 56.1 | 49.2 | 43.3 |
| 10/08/2015 | 10:15:00 | 63.7 | 59.0 | 81.2 | 63.1 | 60.6 | 59.1 | 59.9 | 56.0 | 49.0 | 42.8 |
| 10/08/2015 | 10:30:00 | 63.4 | 59.1 | 80.9 | 61.8 | 60.8 | 59.2 | 59.5 | 55.6 | 48.5 | 41.9 |
| 10/08/2015 | 10:45:00 | 63.8 | 58.7 | 80.5 | 60.9 | 60.7 | 59.0 | 59.9 | 56.3 | 49.7 | 45.8 |
| 10/08/2015 | 11:00:00 | 64.8 | 59.6 | 80.3 | 63.9 | 61.6 | 59.8 | 60.4 | 57.2 | 53.6 | 51.5 |
| 10/08/2015 | 11:15:00 | 66.3 | 59.5 | 79.8 | 63.1 | 61.0 | 60.5 | 60.6 | 58.5 | 57.6 | 58.6 |
| 10/08/2015 | 11:30:00 | 63.7 | 59.6 | 79.9 | 61.5 | 60.9 | 59.3 | 59.9 | 56.0 | 49.9 | 44.8 |
| 10/08/2015 | 11:45:00 | 64.1 | 59.9 | 79.3 | 61.1 | 60.6 | 59.8 | 60.5 | 56.3 | 49.7 | 43.8 |
| 10/08/2015 | 12:00:00 | 64.1 | 58.1 | 74.0 | 61.0 | 59.2 | 57.9 | 60.0 | 55.6 | 49.9 | 56.5 |
| 10/08/2015 | 12:15:00 | 63.0 | 57.1 | 67.4 | 62.7 | 59.2 | 57.5 | 59.7 | 55.6 | 49.0 | 47.4 |

| Date | Time | L _{Aeq} | L _{A90} | L _{Aeq} | | | | | | | |
|------------|----------|------------------|------------------|------------------|------|------|------|------|------|------|------|
| | | | | 63 | 125 | 250 | 500 | 1k | 2k | 4k | 8k |
| 10/08/2015 | 12:30:00 | 71.0 | 57.4 | 66.0 | 60.7 | 59.4 | 60.4 | 70.1 | 59.0 | 50.2 | 44.6 |
| 10/08/2015 | 12:45:00 | 63.8 | 57.8 | 66.8 | 61.1 | 60.3 | 58.8 | 59.8 | 57.0 | 51.1 | 46.0 |
| 10/08/2015 | 13:00:00 | 68.4 | 57.5 | 65.3 | 59.7 | 59.7 | 59.9 | 65.8 | 62.4 | 50.0 | 42.9 |
| 10/08/2015 | 13:15:00 | 63.2 | 57.5 | 66.3 | 60.2 | 58.6 | 57.1 | 59.9 | 56.5 | 49.4 | 42.0 |
| 10/08/2015 | 13:30:00 | 63.6 | 56.3 | 65.8 | 59.8 | 60.3 | 59.6 | 60.3 | 55.7 | 48.8 | 42.3 |
| 10/08/2015 | 13:45:00 | 66.3 | 57.8 | 66.9 | 62.0 | 61.8 | 62.2 | 61.1 | 58.3 | 56.3 | 57.3 |
| 10/08/2015 | 14:00:00 | 65.0 | 58.9 | 68.5 | 64.9 | 62.1 | 60.7 | 60.9 | 57.8 | 52.1 | 47.5 |
| 10/08/2015 | 14:15:00 | 64.2 | 57.5 | 65.7 | 61.2 | 61.5 | 59.4 | 61.0 | 56.3 | 49.6 | 44.4 |
| 10/08/2015 | 14:30:00 | 64.2 | 58.6 | 65.7 | 61.0 | 61.5 | 59.8 | 60.7 | 56.5 | 51.0 | 46.4 |
| 10/08/2015 | 14:45:00 | 63.9 | 57.1 | 66.2 | 61.0 | 59.9 | 58.4 | 60.6 | 56.8 | 49.4 | 44.0 |
| 10/08/2015 | 15:00:00 | 63.9 | 58.0 | 67.3 | 61.4 | 61.1 | 58.9 | 60.6 | 56.5 | 49.0 | 43.3 |
| 10/08/2015 | 15:15:00 | 64.3 | 58.6 | 75.3 | 63.7 | 63.1 | 60.8 | 60.2 | 56.5 | 48.9 | 43.3 |
| 10/08/2015 | 15:30:00 | 64.2 | 59.6 | 79.6 | 62.6 | 61.7 | 60.1 | 60.4 | 56.5 | 49.8 | 44.1 |
| 10/08/2015 | 15:45:00 | 63.2 | 59.3 | 80.5 | 61.9 | 60.7 | 58.9 | 59.6 | 55.2 | 48.0 | 41.1 |
| 10/08/2015 | 16:00:00 | 68.3 | 58.6 | 80.7 | 61.9 | 60.7 | 59.4 | 64.2 | 64.0 | 50.0 | 45.9 |
| 10/08/2015 | 16:15:00 | 64.3 | 59.3 | 80.6 | 62.3 | 61.6 | 60.5 | 60.4 | 56.3 | 50.0 | 42.7 |
| 10/08/2015 | 16:30:00 | 63.3 | 58.6 | 80.7 | 62.6 | 61.9 | 59.3 | 59.0 | 55.5 | 48.8 | 42.3 |
| 10/08/2015 | 16:45:00 | 63.8 | 59.8 | 80.5 | 60.9 | 60.8 | 59.9 | 59.8 | 56.0 | 48.6 | 44.3 |
| 10/08/2015 | 17:00:00 | 63.5 | 58.6 | 80.7 | 60.7 | 60.5 | 59.1 | 60.0 | 55.5 | 47.8 | 41.4 |
| 10/08/2015 | 17:15:00 | 64.6 | 59.7 | 80.7 | 61.5 | 60.6 | 59.5 | 60.9 | 58.0 | 48.8 | 41.9 |
| 10/08/2015 | 17:30:00 | 63.7 | 58.9 | 80.9 | 64.6 | 60.6 | 60.1 | 59.6 | 55.3 | 48.1 | 40.9 |
| 10/08/2015 | 17:45:00 | 65.8 | 60.0 | 80.8 | 63.9 | 62.1 | 61.5 | 62.1 | 58.8 | 48.5 | 41.7 |
| 10/08/2015 | 18:00:00 | 63.7 | 59.4 | 80.7 | 62.6 | 60.6 | 60.8 | 59.5 | 55.4 | 48.2 | 41.9 |
| 10/08/2015 | 18:15:00 | 64.3 | 58.9 | 80.9 | 67.6 | 64.3 | 60.0 | 60.0 | 56.0 | 48.5 | 41.1 |
| 10/08/2015 | 18:30:00 | 63.7 | 59.9 | 80.6 | 61.4 | 61.1 | 60.6 | 59.1 | 56.0 | 49.7 | 42.8 |
| 10/08/2015 | 18:45:00 | 63.6 | 60.2 | 80.6 | 62.2 | 61.7 | 61.1 | 59.0 | 55.3 | 48.2 | 41.4 |
| 10/08/2015 | 19:00:00 | 70.3 | 59.5 | 80.8 | 65.0 | 63.1 | 60.6 | 66.3 | 66.0 | 50.7 | 42.3 |
| 10/08/2015 | 19:15:00 | 63.8 | 59.7 | 80.9 | 61.3 | 60.7 | 60.3 | 59.9 | 55.6 | 47.8 | 40.6 |
| 10/08/2015 | 19:30:00 | 63.7 | 58.2 | 81.0 | 60.1 | 59.7 | 59.0 | 60.2 | 56.0 | 48.2 | 41.1 |
| 10/08/2015 | 19:45:00 | 63.8 | 58.7 | 81.0 | 60.6 | 59.8 | 58.6 | 60.4 | 56.2 | 48.4 | 40.8 |
| 10/08/2015 | 20:00:00 | 64.1 | 58.2 | 81.0 | 60.8 | 61.3 | 60.6 | 60.3 | 56.0 | 47.8 | 41.4 |
| 10/08/2015 | 20:15:00 | 63.0 | 58.1 | 81.0 | 59.9 | 59.7 | 58.7 | 59.5 | 55.2 | 46.8 | 39.3 |
| 10/08/2015 | 20:30:00 | 63.3 | 57.8 | 81.2 | 60.5 | 59.6 | 58.9 | 59.7 | 55.5 | 47.4 | 39.8 |
| 10/08/2015 | 20:45:00 | 63.8 | 57.7 | 81.2 | 62.2 | 62.7 | 59.6 | 60.1 | 55.5 | 47.1 | 39.5 |
| 10/08/2015 | 21:00:00 | 63.5 | 57.9 | 81.2 | 61.5 | 61.1 | 59.3 | 60.0 | 55.2 | 46.5 | 39.5 |
| 10/08/2015 | 21:15:00 | 63.3 | 58.0 | 81.3 | 62.2 | 59.4 | 57.8 | 59.8 | 55.8 | 47.5 | 40.3 |
| 10/08/2015 | 21:30:00 | 63.3 | 58.7 | 81.4 | 60.3 | 58.9 | 57.5 | 60.1 | 55.5 | 46.9 | 39.9 |
| 10/08/2015 | 21:45:00 | 63.4 | 57.8 | 81.6 | 58.4 | 58.2 | 58.0 | 60.2 | 55.6 | 47.2 | 38.7 |
| 10/08/2015 | 22:00:00 | 63.6 | 57.9 | 82.0 | 62.6 | 60.1 | 57.9 | 60.4 | 55.7 | 47.1 | 38.5 |
| 10/08/2015 | 22:15:00 | 63.3 | 56.9 | 82.2 | 59.9 | 58.9 | 57.6 | 60.2 | 55.6 | 46.7 | 39.2 |
| 10/08/2015 | 22:30:00 | 63.1 | 56.4 | 82.5 | 60.0 | 58.8 | 57.1 | 59.7 | 55.4 | 47.2 | 39.2 |
| 10/08/2015 | 22:45:00 | 64.2 | 57.1 | 82.9 | 62.7 | 61.3 | 58.8 | 60.4 | 56.7 | 49.0 | 43.1 |

| Date | Time | L _{Aeq} | L _{A90} | L _{Aeq} | | | | | | | |
|------------|----------|------------------|------------------|------------------|------|------|------|------|------|------|------|
| | | | | 63 | 125 | 250 | 500 | 1k | 2k | 4k | 8k |
| 10/08/2015 | 23:00:00 | 63.3 | 57.8 | 83.4 | 60.0 | 58.0 | 57.1 | 59.8 | 55.7 | 47.1 | 38.8 |
| 10/08/2015 | 23:15:00 | 65.0 | 56.8 | 83.6 | 59.7 | 57.9 | 57.2 | 61.0 | 58.6 | 53.2 | 45.4 |
| 10/08/2015 | 23:30:00 | 63.0 | 56.7 | 83.1 | 59.2 | 58.4 | 57.3 | 59.6 | 55.2 | 46.9 | 40.2 |
| 10/08/2015 | 23:45:00 | 63.0 | 56.4 | 82.7 | 59.2 | 57.7 | 57.5 | 59.7 | 55.2 | 46.2 | 38.6 |
| 11/08/2015 | 00:00:00 | 63.2 | 56.0 | 82.3 | 59.8 | 58.1 | 57.6 | 59.5 | 56.0 | 48.6 | 39.5 |
| 11/08/2015 | 00:15:00 | 63.2 | 55.4 | 82.2 | 58.3 | 57.5 | 57.6 | 60.3 | 55.4 | 45.4 | 36.6 |
| 11/08/2015 | 00:30:00 | 62.6 | 55.6 | 82.0 | 58.0 | 57.6 | 58.0 | 59.3 | 54.6 | 44.7 | 35.3 |
| 11/08/2015 | 00:45:00 | 62.5 | 55.1 | 81.8 | 57.8 | 56.7 | 58.3 | 59.2 | 54.6 | 44.9 | 38.8 |
| 11/08/2015 | 01:00:00 | 63.0 | 54.5 | 81.7 | 57.8 | 56.8 | 56.0 | 60.2 | 55.4 | 44.8 | 36.2 |
| 11/08/2015 | 01:15:00 | 61.7 | 53.5 | 81.6 | 56.4 | 55.5 | 54.8 | 59.0 | 53.9 | 42.9 | 34.2 |
| 11/08/2015 | 01:30:00 | 61.4 | 52.9 | 81.5 | 56.4 | 55.6 | 54.4 | 58.4 | 53.8 | 43.9 | 34.9 |
| 11/08/2015 | 01:45:00 | 61.2 | 53.2 | 81.5 | 56.6 | 55.8 | 54.5 | 58.1 | 53.4 | 44.0 | 35.8 |
| 11/08/2015 | 02:00:00 | 60.9 | 52.9 | 81.5 | 55.4 | 54.1 | 53.5 | 58.1 | 52.9 | 41.5 | 33.3 |
| 11/08/2015 | 02:15:00 | 60.8 | 53.2 | 81.5 | 56.3 | 54.6 | 54.6 | 57.8 | 52.8 | 42.2 | 34.3 |
| 11/08/2015 | 02:30:00 | 61.1 | 53.0 | 81.5 | 60.7 | 57.0 | 55.3 | 57.8 | 53.0 | 43.8 | 36.5 |
| 11/08/2015 | 02:45:00 | 61.1 | 52.9 | 81.5 | 56.5 | 55.0 | 54.5 | 58.0 | 53.2 | 42.7 | 35.9 |
| 11/08/2015 | 03:00:00 | 60.9 | 52.9 | 81.5 | 55.7 | 53.9 | 53.7 | 58.0 | 53.2 | 42.8 | 34.1 |
| 11/08/2015 | 03:15:00 | 60.2 | 52.8 | 81.6 | 55.9 | 53.8 | 53.5 | 57.1 | 51.9 | 42.1 | 34.3 |
| 11/08/2015 | 03:30:00 | 59.7 | 52.8 | 81.7 | 55.8 | 53.2 | 52.8 | 56.4 | 51.5 | 41.6 | 33.6 |
| 11/08/2015 | 03:45:00 | 60.7 | 52.8 | 81.7 | 56.4 | 53.8 | 53.6 | 57.7 | 53.0 | 42.7 | 34.7 |
| 11/08/2015 | 04:00:00 | 61.6 | 53.2 | 81.7 | 57.4 | 55.4 | 55.3 | 58.6 | 53.7 | 44.2 | 36.7 |
| 11/08/2015 | 04:15:00 | 59.7 | 52.8 | 81.7 | 60.7 | 56.1 | 52.9 | 56.1 | 51.4 | 42.3 | 34.5 |
| 11/08/2015 | 04:30:00 | 61.1 | 52.9 | 81.7 | 56.8 | 55.0 | 54.8 | 58.0 | 53.2 | 43.7 | 35.3 |
| 11/08/2015 | 04:45:00 | 62.4 | 53.3 | 81.7 | 58.2 | 56.6 | 56.9 | 59.3 | 54.5 | 45.1 | 37.0 |
| 11/08/2015 | 05:00:00 | 62.5 | 54.2 | 81.7 | 57.6 | 56.4 | 58.2 | 59.3 | 54.5 | 45.1 | 36.7 |
| 11/08/2015 | 05:15:00 | 62.9 | 53.9 | 81.7 | 59.2 | 57.0 | 57.0 | 59.9 | 55.2 | 45.5 | 37.8 |
| 11/08/2015 | 05:30:00 | 62.8 | 54.0 | 81.7 | 58.5 | 57.3 | 57.9 | 59.2 | 55.5 | 47.3 | 40.1 |
| 11/08/2015 | 05:45:00 | 63.1 | 55.6 | 81.7 | 58.1 | 57.4 | 58.4 | 59.8 | 55.5 | 46.1 | 37.4 |
| 11/08/2015 | 06:00:00 | 64.6 | 58.4 | 81.6 | 62.6 | 60.7 | 61.2 | 60.9 | 56.8 | 48.2 | 40.5 |
| 11/08/2015 | 06:15:00 | 64.6 | 58.2 | 81.6 | 60.0 | 59.1 | 58.8 | 61.3 | 57.6 | 49.6 | 41.8 |
| 11/08/2015 | 06:30:00 | 65.6 | 58.4 | 81.5 | 61.4 | 60.5 | 60.7 | 62.3 | 58.3 | 49.9 | 41.6 |
| 11/08/2015 | 06:45:00 | 65.0 | 59.4 | 81.7 | 61.8 | 60.2 | 59.2 | 61.8 | 57.6 | 49.3 | 43.2 |
| 11/08/2015 | 07:00:00 | 65.0 | 60.1 | 81.6 | 64.2 | 61.7 | 60.5 | 61.1 | 57.8 | 50.3 | 42.9 |
| 11/08/2015 | 07:15:00 | 64.3 | 60.4 | 81.5 | 63.2 | 61.0 | 60.0 | 60.2 | 56.9 | 49.9 | 44.2 |
| 11/08/2015 | 07:30:00 | 64.4 | 58.4 | 81.3 | 63.1 | 61.6 | 60.6 | 60.5 | 56.5 | 48.6 | 42.0 |
| 11/08/2015 | 07:45:00 | 64.0 | 59.8 | 81.3 | 62.2 | 61.0 | 60.1 | 60.1 | 56.0 | 49.3 | 44.5 |
| 11/08/2015 | 08:00:00 | 64.0 | 58.3 | 81.3 | 65.6 | 62.3 | 60.7 | 59.5 | 55.7 | 48.8 | 41.8 |
| 11/08/2015 | 08:15:00 | 64.4 | 59.7 | 81.2 | 63.2 | 61.6 | 61.7 | 60.0 | 56.2 | 49.0 | 41.6 |
| 11/08/2015 | 08:30:00 | 64.9 | 60.5 | 81.4 | 63.0 | 61.7 | 62.2 | 60.3 | 56.9 | 50.5 | 43.6 |
| 11/08/2015 | 08:45:00 | 65.1 | 60.0 | 81.3 | 62.9 | 64.1 | 62.1 | 60.5 | 56.7 | 50.6 | 45.3 |
| 11/08/2015 | 09:00:00 | 65.2 | 60.1 | 81.2 | 62.7 | 62.2 | 60.7 | 60.8 | 58.5 | 52.0 | 44.4 |
| 11/08/2015 | 09:15:00 | 65.2 | 60.3 | 81.3 | 65.2 | 62.9 | 61.7 | 61.1 | 57.1 | 50.3 | 43.5 |

| Date | Time | L _{Aeq} | L _{A90} | L _{Aeq} | | | | | | | |
|------------|----------|------------------|------------------|------------------|------|------|------|------|------|------|------|
| | | | | 63 | 125 | 250 | 500 | 1k | 2k | 4k | 8k |
| 11/08/2015 | 09:30:00 | 65.0 | 59.7 | 80.7 | 62.9 | 61.7 | 61.3 | 61.1 | 57.2 | 49.9 | 43.9 |
| 11/08/2015 | 09:45:00 | 65.6 | 60.1 | 80.7 | 65.1 | 65.8 | 61.8 | 60.5 | 57.2 | 52.7 | 53.5 |
| 11/08/2015 | 10:00:00 | 64.0 | 59.4 | 80.9 | 61.1 | 60.7 | 60.2 | 60.1 | 56.1 | 49.0 | 41.2 |
| 11/08/2015 | 10:15:00 | 65.0 | 58.6 | 80.7 | 63.0 | 62.2 | 60.8 | 61.3 | 57.1 | 49.6 | 41.6 |
| 11/08/2015 | 10:30:00 | 64.3 | 57.9 | 80.8 | 61.9 | 61.3 | 60.1 | 60.7 | 56.2 | 48.8 | 43.1 |
| 11/08/2015 | 10:45:00 | 66.3 | 60.3 | 80.6 | 63.0 | 62.6 | 62.7 | 62.7 | 58.4 | 51.1 | 46.9 |

APPENDIX H: Glossary of Acoustic Terms

DECIBEL (dB) - A unit of sound pressure measurement

Sound Pressure Level in dB (L_p) = $20 \log (\text{Measured sound pressure}/\text{Reference sound pressure} = 20 \mu\text{Pa})$

dB(A) - The A -weighted sound pressure level, the weighting network reduces low frequency sound in a similar way to the human ear.

REVERBERATION TIME (RT or T) – decay of sound in rooms

The time taken for a sound, once terminated, to fall through 60dB i.e. to one millionth of its original sound intensity. T_{30}

– RT for first 30dB of decay. RT_{500} - Mid frequency RT.

HERTZ (Hz) - a unit of frequency measurement. The normal range of hearing is from 20Hz to about 15kHz.

ABSORPTION COEFFICIENT – degree to which a material absorbs sound.

The ratio of absorbed to incident sound energy (perfect absorber = 1)

SOUND REDUCTION INDEX R – quantity which describes a material's ability to reduce the sound pressure level across it (e.g. a wall or floor)

$$R = L_1 - L_2 + 10 \log (S/A)$$

L_1 - Average sound pressure level in source room (averaged from 100 Hz – 3150 Hz)

L_2 - Average sound pressure level in receiving room (averaged from 100 Hz – 3150 Hz)

S – Wall Area (m^2)

A – Total absorption in receiving room (m^2 units)

R_w – weighted sound reduction index

AVERAGE ROOM TO ROOM LEVEL DIFFERENCE – D , dB = $L_1 - L_2$, averaged 1/3 octave bands from 100Hz – 3150kHz.

D_w – weighted value of D (usually 2 - 3dB higher)

$D_{nT, w}$ – D_w corrected for reverberation time of receiving room

NOISE RATING CURVES (NR CURVES) – set of curves used to describe optimum background noise levels for different tasks.

$L_{10/90}$ LEVEL (dB) - The level in dB of a time varying sound pressured level (e.g. traffic) exceeded for 10%/90% of the time of measurement.

L_{90} is usually called the BACKGROUND NOISE LEVEL.

L_{eq} AVERAGE SOUND PRESSURE LEVEL – level dB of a time varying sound pressure level with equal amounts of energy above and below it, for the time of measurement.

TONAL NOISE – noise of a single frequency (or a narrow band of frequencies that can be perceived as a tone), audible above the broad band noise background. Noise which is at least 5dB above the average of the 1/3 octave band sound pressure levels immediately on either side of it.