

Royal Prince Alfred Hospital Redevelopment (RPAH Redevelopment)

Construction Noise and Vibration Monitoring Report 29

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Attention To	CPB Contractors Pty Limited

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# 1 INTRODUCTION

This report presents the results of the noise and vibration monitoring conducted by Acoustic Logic during the site establishment works for the RPA Hospital redevelopment, located at 50 Missenden Road, Camperdown. Details presented in this report include monitoring locations, relevant noise and vibration objectives, measured noise and vibration levels over the presented monitoring period and a discussion of results where applicable.

This report covers the twenty-ninth fortnight since the beginning of construction monitoring, being between Monday 20<sup>th</sup> January, 2025 and Sunday 02<sup>nd</sup> February, 2025.

Unattended noise and vibration monitoring has been undertaken to satisfy the requirements of Condition B26 of SSD-47662959's Development Consent, in conjunction with the noise and vibration management levels established within the *Early Works Construction Noise and Vibration Management Plan*, prepared by this office, and as they are so updated throughout the construction process where necessitated (Ref: 20230239.9/0610A/R1/LA). Condition B26 of SSD-47662959's Development Consent is provided below for reference:

## ***"Environmental Management Plan Requirements***

**B26.** *Management plans required under this consent must be prepared having regard to the relevant guidelines, including but not limited to the Environmental Management Plan Guideline: Guideline for Infrastructure Projects (DPIE April 2020).*

*Notes:*

*The Environmental Management Plan Guideline is available on the Planning Portal at: <https://www.planningportal.nsw.gov.au/major-projects/assessment/post-approval>.*

*The Planning Secretary may waive some of these requirements if they are unnecessary or unwarranted for particular management plans."*

## 2 SITE DESCRIPTION

The site is maintained on Lot 1000 DP 1159799, and is bound by the existing operational RPA Hospital to the west, the Centenary Institute to the north, and University of Sydney's Bruce William Pavilion and Susan Wakil Health Building to the east and south respectively. The site is surrounded by various residential, commercial, hospital, university, research and active recreation sensitive receivers generally.

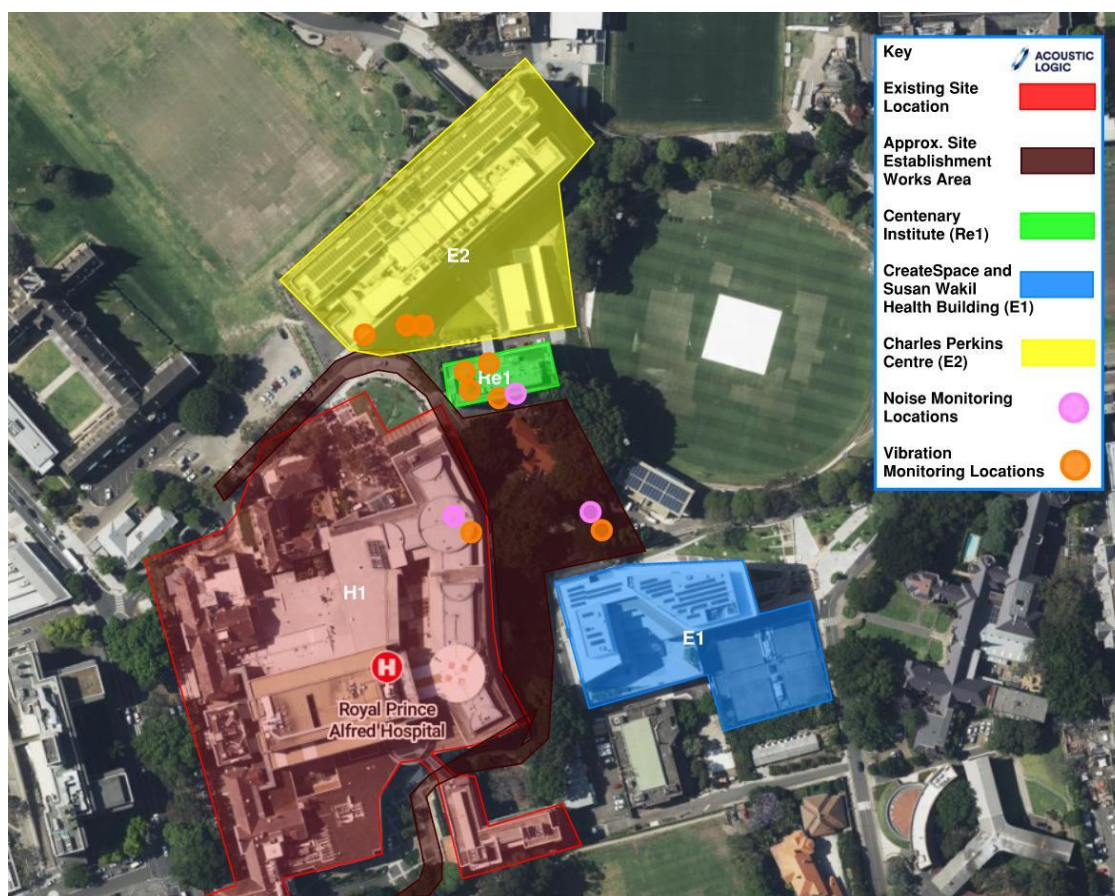
The works maintained within Early Works and Site Establishment pertain specifically to works along Lambie Dew Drive and John Hopkins Drive.

The surrounding affected sensitive receivers that are investigated within the contents of this monitoring assessment are as presented below:

**Table 1 – Surrounding Sensitive Receivers**

ID No.	Receiver Description	Receiver Category
H1	RPA Hospital Main Building	Hospital
Re1	Centenary Institute	Research Facilities
E1	CreateSpace and Susan Wakil Health Building	Education
E2	Charles Perkins Centre	

See an aerial photo in Figure 1 below for detailed receiver locations.



**Figure 1: Aerial Site Map with Nearest Sensitive Receivers (Sourced from Sixmaps)**

### 3 NOISE AND VIBRATION MANAGEMENT LEVELS

The following section details the relevant construction noise and vibration requirements assessed throughout the monitoring period.

#### 3.1 NOISE MANAGEMENT LEVELS

Noise Management levels relevant to the contents of this report are summarised in the table below, as provided within the *Early Works Construction Noise and Vibration Management Plan*, prepared for the project by this office (Ref: 20230239.9/0610A/R1/LA). Note that based upon measurements and discussions with relevant stakeholders on 12/03/2024, the Noise Management Level for the Animal Housing, Breeding and Observation Rooms within Centenary Institute will be reduced to 62dB(A)  $L_{eq}(15 \text{ min})$ , and this will be adopted within this report, as well as further subsequent assessments:

**Table 2 – Noise Management Levels**

Receiver	Room Usage	Noise Management Level dB(A) $L_{eq}(15 \text{ min})$
H1	NICU	60 (Internally)
E1 and E2	All	45 (Internally)
R1	Animal Housing / Breeding / Observation Rooms	62 (Internally)
	Rat Operating Room	48 (Internally)

#### 3.2 PROJECT VIBRATION CRITERIA

Relevant project vibration criteria to the contents of this report are provided within the table below. Vibration criteria presented for spaces within Re1 and E2 have been updated based upon the conclusion of the "Baseline Monitoring Results," report, as well as the "Construction Noise and Vibration Monitoring Report 1," both of which were prepared by this office for the project (Ref: 20230239.17/0412A/R1/LA and 20230239.17/2301A/R0/LA). Supplementarily, further correspondence between Charles Perkins Centre and the project team on 20/02/2024 has resulted in the reduction of criteria within the animal spaces on B2 to VC-A criteria, and this is reflected within the table below and has been in effect through this monitoring period:

**Table 3 – Summarised Proposed Project Vibration Limits**

<b>Receiver</b>	<b>Location</b>	<b>Vibration Criteria (<math>\mu\text{ms}^{-1}</math>)</b>
Re1 Centenary Institute	L3 Fish Tank Room	400 $\mu\text{ms}^{-1}$ Peak Particle Velocity
	L4 – Animal Behaviour / Holding / Breeding Rooms (Northern Façade)	VC-A (ASHRAE Handbook) (50 $\mu\text{ms}^{-1}$ ) RMS Velocity
	L4 – Animal Behaviour / Holding / Breeding Rooms (Southern Façade – Isolated with SSF Pads)	150 $\mu\text{ms}^{-1}$ RMS Velocity
E1 Createspace and Susan Wakil Health Building	All spaces	DIN 4150-3 Type 1 Criteria (20,000 $\mu\text{ms}^{-1}$ / 20 $\text{mms}^{-1}$ ) Peak Particle Velocity
E2 Charles Perkins Centre	Imaging Equipment (Southern Wing Corridor)	VC-B (ASHRAE Handbook) (25 $\mu\text{ms}^{-1}$ ) RMS Velocity
	Animal Behaviour / Holding / Breeding Rooms	VC-A (ASHRAE Handbook) (50 $\mu\text{ms}^{-1}$ ) RMS Velocity
H1 RPA Hospital Main Building	Operating Theatres (Level 3)	100 $\mu\text{ms}^{-1}$ RMS Velocity

## 4 MONITORING EQUIPMENT AND LOCATIONS

### 4.1 NOISE MONITORING EQUIPMENT AND LOCATIONS

Unattended noise monitoring was conducting using Acoustic Research Laboratories Pty Ltd noise loggers. The loggers were programmed to store 15-minute statistical noise levels throughout the monitoring period. The equipment was calibrated at the beginning and the end of each measurement using a Rion NC-73 calibrator; no significant drift was detected. All measurements were taken on A-weighted fast response mode.

Three individual noise monitors have been installed surrounding the site at the following locations:

- Centenary Institute Level 02 Office (Northern Façade – Simulating Impacts on L4 floorplate).
- RPA Hospital Main Building – Level 03 NICU.
- Outside Susan Wakil Health Building, on grade.

Please refer to Figure 1 for detailed monitoring locations.

## 4.2 VIBRATION MONITORING EQUIPMENT AND LOCATIONS

Vibration monitoring was conducted using either Texcel ETM vibration monitors with external Tri-axial Geophones, or Bruel and Kjaer Type 4450 vibration monitors.

Three Texcel ETM monitors have been placed surrounding the site at the following locations:

- Centenary Institute Level 3, Fish Tanks.
- Charles Perkins Centre Level B1, Southern Wing Observation Room E (Note that this monitor has been installed at this location to send alert messages at  $100 \mu\text{ms}^{-1}$  PPV vibration events, due to the limited reception achieved within the B2 area from the Bruel and Kjaer Type 4450 monitor installed to assess vibration impacts with respect to the VC-A vibration criteria curve within the animal holding area.
- Outside Susan Wakil Health Building, on grade.

Additionally, six Bruel and Kjaer Type 4450 Vibration monitors have been installed surrounding the site at the following locations:

- Centenary Institute:
  - Level 4 Surgery (Southern Façade).
  - Level 4 Change Rooms (Northern Façade)
  - Level 4 Northern façade Experimentation Room.
- Charles Perkins Centre:
  - Level B1, Southern Wing Corridor.
  - Level B1, Southern Wing Observation Room E
- RPA Hospital Main Building Level 3 NICU.

Please refer to Figure 1 for detailed monitoring locations.



## 5 RESULTS

Appendix A presents the results of the noise monitoring, whilst Appendix B presents the results of the vibration monitoring where exceedances occurred during the monitoring period as presented within the contents of this report.

A discussion pertaining the findings of the noise and vibration monitoring undertaken during this monitoring period is provided within the proceeding sections.

### 5.1 NOISE MONITOING RESULTS DISCUSSION

Noise monitoring conducted throughout the monitoring period shows general adherence to the noise management levels provided within Section 3 of this letter.

#### For the Holding, Breeding and Observation Rooms

- Due to the monitor filling memory card storage, no monitoring data was collated on 23/01/25.
- Noise levels were observed to be below the Holding / Breeding / Observation Rooms throughout the course of the monitoring period.
- Ongoing monitoring of noise impacts on CI to continue.

#### For RPAH Main Building L03 NICU

- The monitor is located underneath a benchtop and against two individual walls within the NICU area on Level 03 of the hospital main building. Due to the reflections experienced at the monitoring location due to this, a 5dB correction has been conservatively applied to the noise levels measured at the monitoring station.
- Noise levels were observed to be measured above the NML within the NICU space on the following dates:
  - 21/01/2025.
  - 22/01/2025.
  - 24/01/2025.
  - 30/01/2025.
  - 31/01/2025.
- Noise levels during construction hours were not observed to be above the NML for longer than one 15-minute period at a time, and hence it is likely that the large majority of these events were caused by internal operational activity within the space, as opposed to construction works, noting that construction works are typically continuous in nature.
- Generally, noise levels were measured to be marginally above the NML (Within 3dB).
- We also note that there are many 15-minute periods outside of construction hours where recorded levels are above the area's NML observed throughout the monitoring period.
- Ongoing monitoring to continue within the NICU space.

#### For the Susan Wakil Health Building

- Available data for monitoring period presented.

- With respect to the monitoring data, the noise monitor located outside of the Susan Wakil Health Building is within the demolition site boundary and approximately 15m closer to the area of the works than the façade of the Susan Wakil Health Building.
- Noting this increased distance attenuation, in conjunction with the transmission loss experienced through the inoperable façade of the Susan Wakil Health Building when comparing internal and external noise levels, Acoustic Logic expect that, at minimum, there is a 30dB reduction between the measured noise levels by the monitor, when compared with the resultant internal noise levels within the receiver.
- This reduction is considered conservative due to the distance between the monitor and the building, and hence, the noise impacts would be further reduced than what is outlined below in reality.
- Notwithstanding and of the data available, noise levels have been measured to be above the NML at the monitoring location on the following dates:
  - 22/01/2025.
  - 23/01/2025.
- Noise levels impacting Susan Wakil will be continued to be monitored throughout the early works construction to assess the impact of this receiver.

## 5.2 VIBRATION MONITORING RESULTS DISCUSSION

With regards to the vibration measured vibration levels during the monitoring period, we note the following:

- Note that the graphs presented within the Appendix of this document show the maximum recorded velocity for each individual frequency within a given day's monitoring period.
- Data has only been provided for days in which exceedances attributed to vibration works have been experienced at the monitoring station.
- The following section provides discussion pertaining to the measured exceedances observed throughout the period at individual monitoring locations:

### 5.2.1 Centenary Institute:

- Level 1 – Laser Imaging Room (Electrical Cupboard):
  - Precision imaging equipment such as the laser scanning apparatus investigated by this monitoring station are impacted by vibration through impacts on output results.
  - This would hence be observed by operators of the equipment, whereby the system would not be operating correctly/results of the system would be impacted.
  - To the knowledge of this office, no impacts on the results output of the equipment have been reported by Centenary Institute throughout the early works construction period.
  - Further, and based upon onsite inspections and testing, AL note that the Laser room is subject to various sources of ambient vibration from the operation of the facility which contribute to the levels measured during construction, inclusive of refrigerant plant maintained within the basement of the facility.
  - Where any changes to the operation / results of the laser scanning apparatus are observed by the operators of the equipment, this is to be relayed to this office for investigation and alignment with construction activity to appropriately assess and mitigate impacts.
- Level 3 – Fish Tanks:
  - No exceedances of vibration criteria were observed throughout this monitoring period.

- Level 4 – Northern Façade (Bathroom and Experimentation Room – VC-A Criteria):
  - No exceedance events were measured by both northern façade monitors throughout the monitoring period.
  - Individual exceedance events were recorded by the northern façade monitoring stations on the following dates:
    - Northern Bathroom - 21/01/2025 – Approx.. 30% exceedance.
    - Experimentation Room - 23/01/2025 – Approx.. 1600% exceedance – It is unlikely that the events measured on this date were related to construction activity, noting that there is significant exceedance observed in the translational directions that, if impacting the L4 slab, would have also been recorded by the other monitors on this floorplate. It is likely this was the result of a collision with the geophone.
  - No other exceedances were observed throughout the monitoring period.
- Level 4 – Southern Façade (Surgery Room – 150  $\mu\text{ms}^{-1}$  Criteria):
  - No exceedances observed during monitoring period.
- Vibration exceedances throughout the monitoring period have been attributed to piling works in the northern laneway adjacent to the CI facade. Due to the relatively short timeframe of works associated with the northern piling area, alternative construction methodology was not explored.

### 5.2.2 Charles Perkins Centre:

- Southern Corridor (Imaging):
  - Exceedances of B2 VC-B criteria which display characteristics consistent with construction activity were observed at the monitoring station during construction hours on the following dates during the monitoring period:
    - 21/01/2025.
    - 22/01/2025.
    - 23/01/2025.
    - 24/01/2025.
    - 29/01/2025.
    - 31/01/2025.
  - Exceedances are generally within 200% of the conservative VC-B criteria (75.  $\mu\text{ms}^{-1}$ )
  - The maximum level measured during the monitoring period was 121 $\mu\text{ms}^{-1}$  on 23/01/2025.
  - Exceedances are generally observed at 12.5Hz, likely to be the natural frequency of the CPC suspended slab. Exceedances at frequencies exclusive of 12.5Hz, 16Hz and 20Hz are rarely observed.
  - With regards to the monitoring period within the CPC Basement, we note the following:
    - Exceedances throughout the monitoring period may have been associated with the excavation works being undertaken at the corner of Lambie Dew Drive and John Hopkins Drive.

- Works were undertaken with the smallest available excavator, and due to time factors, the equipment was not reselected, in order to shorten the period of impact on surrounding sensitive receivers.
  - When comparing the results of the B2 monitoring location with other surrounding monitors, we note that the B2 monitor is located on a suspended slab, and hence it is possible that significant amplification of the vibration impacts from these works is occurring and resulting in exceedances at the monitoring location.
  - For many of the measured exceedances there is a lack of correlation between the southern corridor monitor and the other monitoring stations surrounding the project site. Therefore, it is likely that some or most of these spikes have been caused by factors exclusive of the construction activity within the RPA Hospital project area.
  - It is prudent to note that there were significant exceedances observed within the monitoring period which were outside of hours of works throughout the period, noting that various repeated exceedances were observed before 7am and after 5.00pm and on weekend days during the period. These events have not been attributed to the impacts of the construction.
- Observation Room (Adjoining corridor):
    - A collection of exceedances were measured at the monitoring station on 21/01/2025 at approximately 4pm. These exceedances have not been attributed to construction activity for the following reasons:
      - The measured levels are extremely high recorded levels (Measuring up to  $86,000 \mu\text{ms}^{-1}$ ). This is not characteristic of the construction activity throughout the works generally.
      - Additionally, the event is not correlated to an exceedance event at any of the monitors surrounding the works, including the other monitor on The CPC B2 floorplate.
      - If an exceedance event was generated by the construction site of this magnitude, there would be exceedances measured across all of the monitoring stations.
      - As this is not the case, it is likely that these extremely high levels are generated by someone interacting with the geophone (knocking the equipment).
    - One exceedance event was measured on 10/01/2025 at approx. 7.15am of magnitude  $63\mu\text{ms}^{-1}$  (Approx.. 26% exceedance). This event was not correlated with an exceedance event at any of the other monitoring stations.

### **5.2.3 RPA Hospital Main Building – Level 03 NICU:**

- One exceedance event was measured on 31/01/2025 – 12.30pm, however due to the nature of the measured levels, has not been attributed to construction activity.
- Monitoring of vibration impacts to continue for L3 floorplate.

### **5.2.4 Susan Wakil Health Building:**

- No exceedances of criteria were observed due to construction works during the monitoring period.

## 6 CONCLUSION

Noise and vibration monitoring has been conducted by Acoustic Logic for the Early Works being undertaken for SSD-47662959, the RPA Hospital Redevelopment, located at 50 Missenden Road, Camperdown.

This report covers the twenty-ninth fortnight since the beginning of construction monitoring, being between Monday 20<sup>th</sup> January, 2025 and Sunday 02<sup>nd</sup> February, 2025.

Monitoring results have been provided with reference to the Noise and Vibration Management Levels established within the *Early Works Construction Noise and Vibration Management Plan*, prepared by this office, or as they have been updated throughout the construction process, specifically pertaining to the recommendations of the *Baseline Monitoring Results* and *Construction Noise and Vibration Monitoring Report 1*, both also prepared by this office (Ref: 20230239.9/0610A/R1/LA, 20230239.17/0412A/R1/LA and 20230239.17/2301A/R0/LA).

Noise monitoring results have been provided within Appendix A, whilst vibration monitoring results have been provided throughout Appendix B of this letter.

We trust this information is satisfactory. Please contact us should you have any further queries.

Yours faithfully,

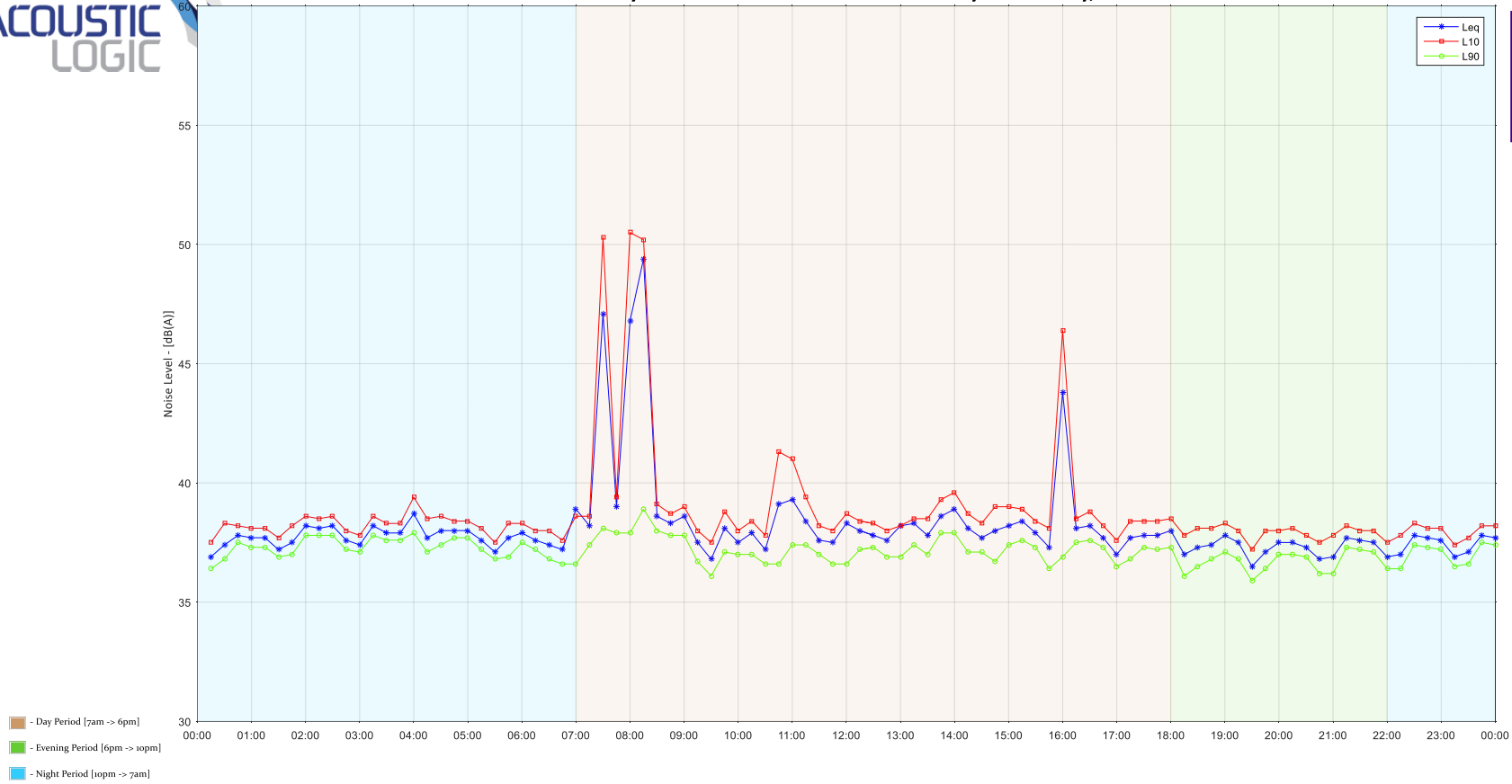


Acoustic Logic Pty Ltd  
Lachlan Abood

## **APPENDIX A – NOISE MONITORING RESULTS**

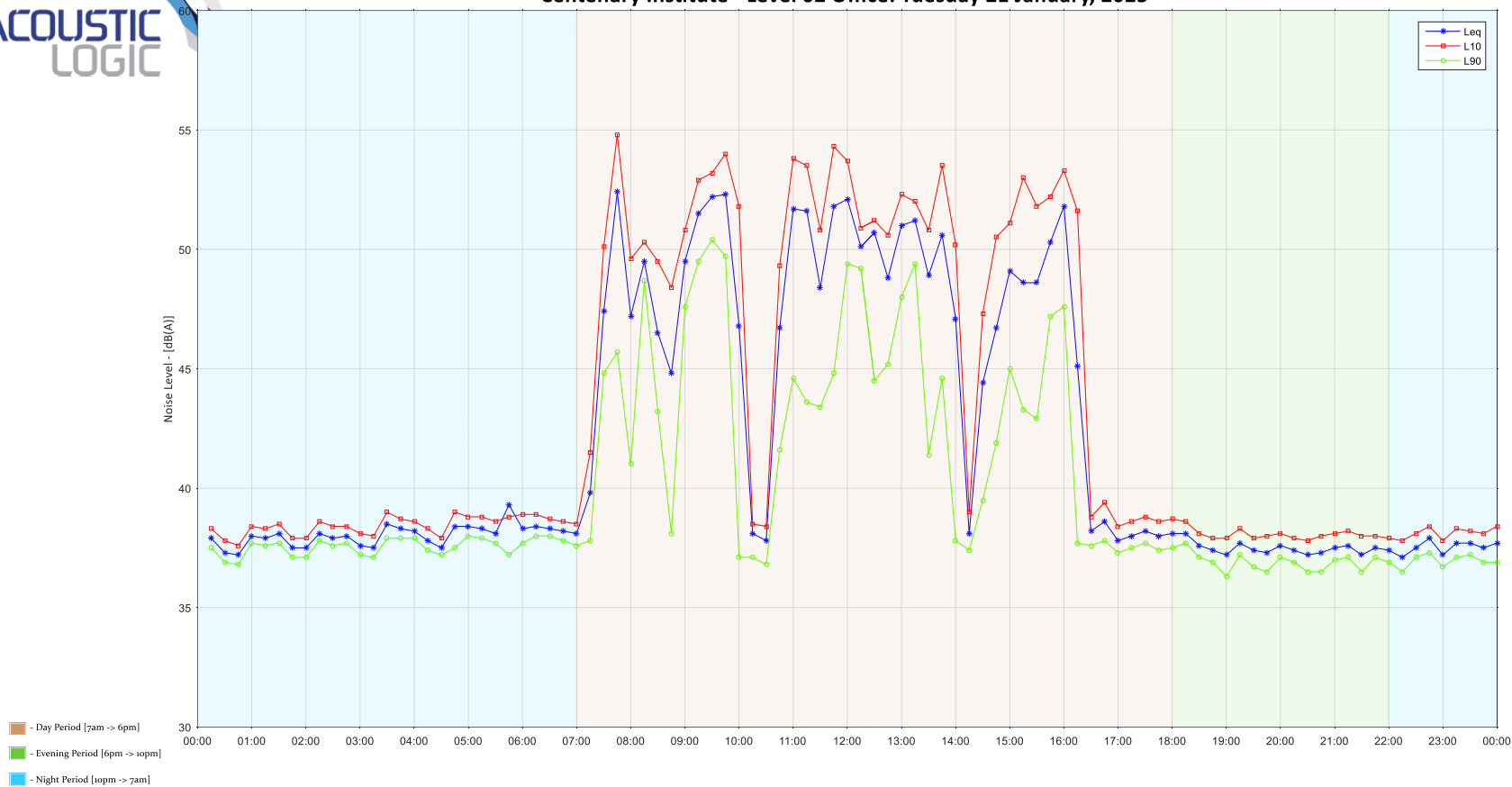
### **CENTENARY INSTITUTE – LEVEL 02 OFFICE (NORTHERN FAÇADE)**

# Centenary Institute - Level 02 Office: Monday 20 January, 2025



All measured levels are below Animal Housing / Breeding / Observation Room NML  $\leq 62\text{dB(A)}_{\text{Leq}}$

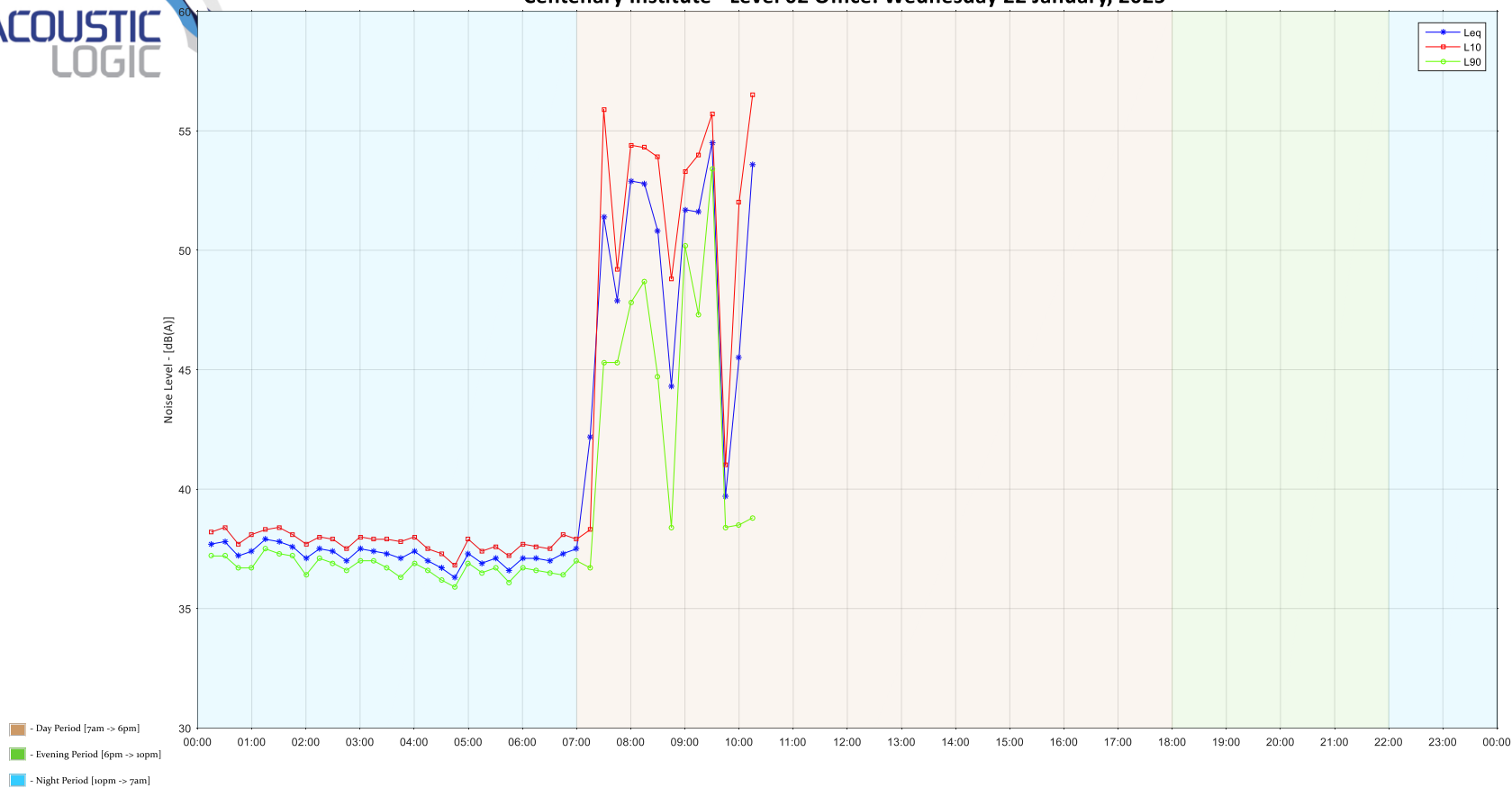
# Centenary Institute - Level 02 Office: Tuesday 21 January, 2025



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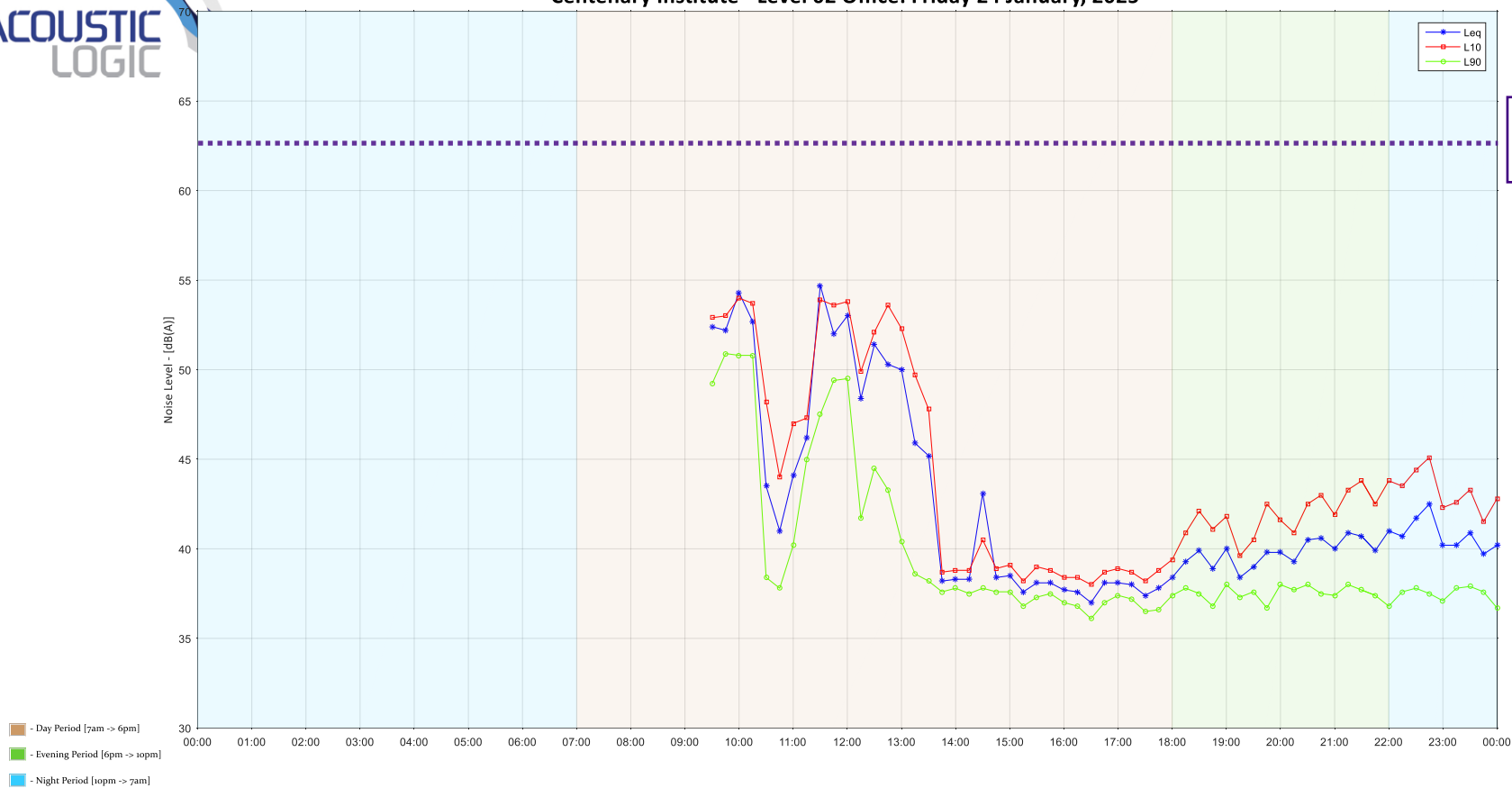


# Centenary Institute - Level 02 Office: Wednesday 22 January, 2025



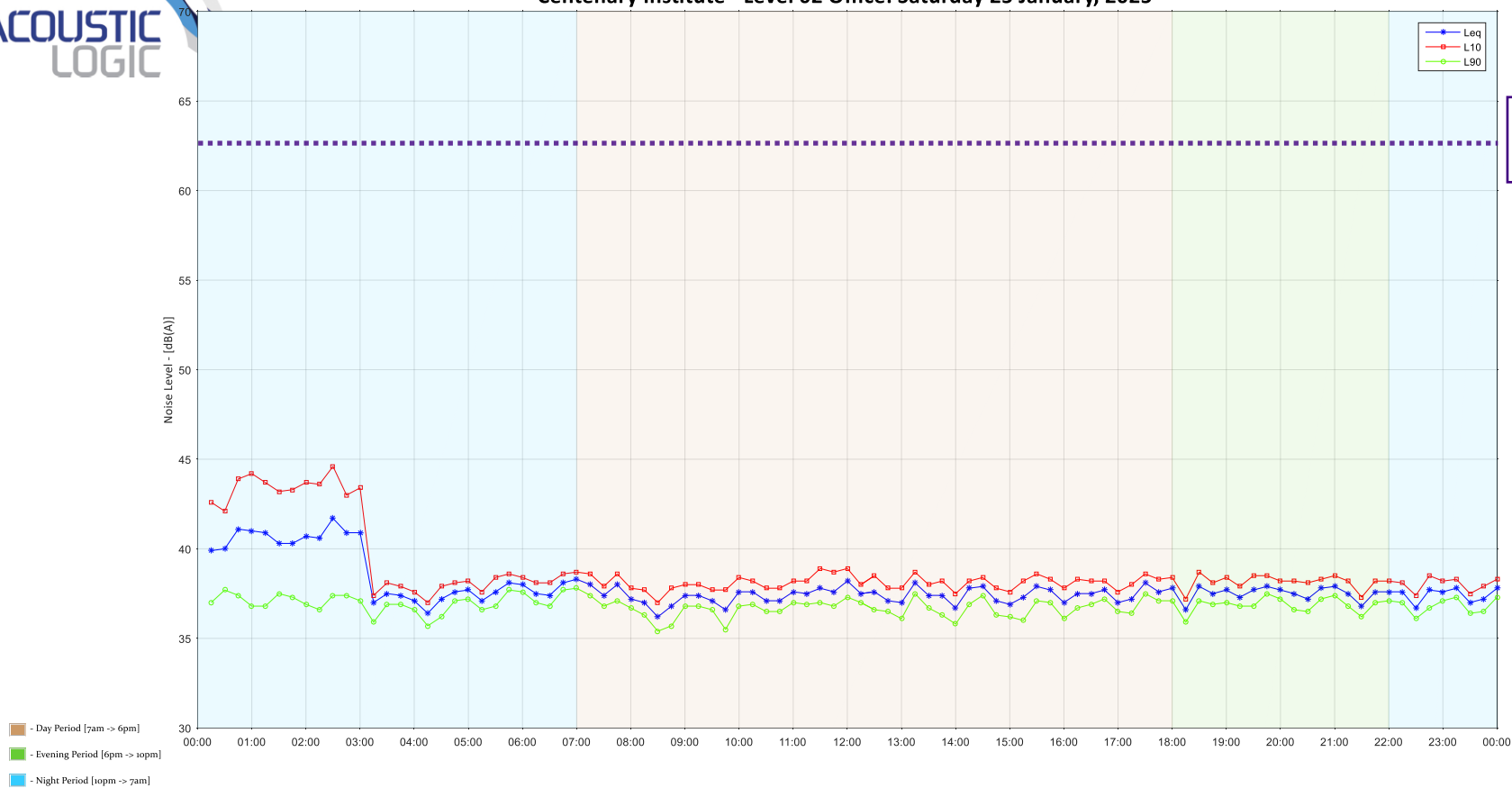
All measured levels are below Animal Housing / Breeding / Observation Room NML  $\leq 62\text{dB(A)}_{L_{eq}}$

# Centenary Institute - Level 02 Office: Friday 24 January, 2025



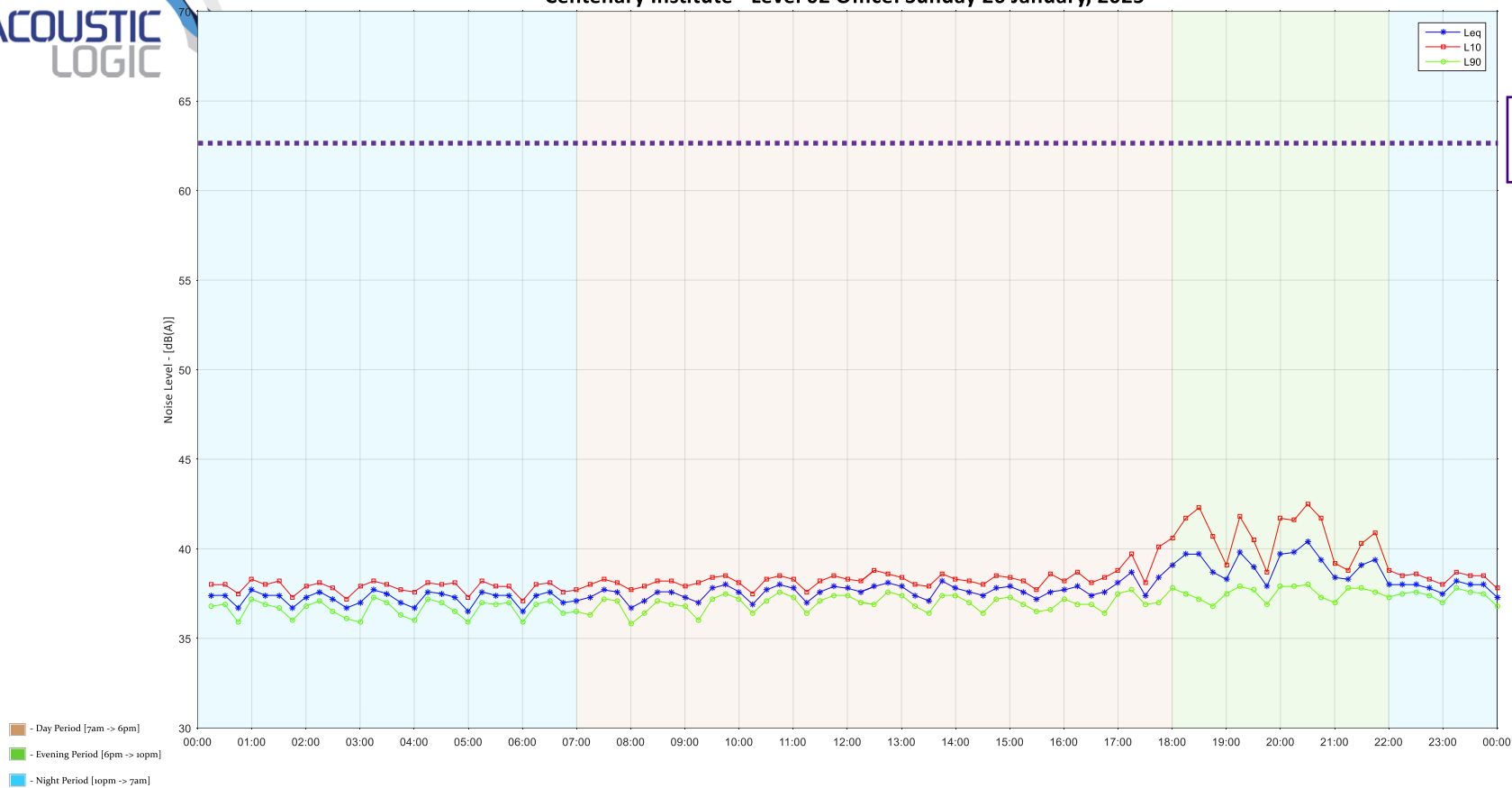
Animal Housing / Breeding /  
Observation Room NML  
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# Centenary Institute - Level 02 Office: Saturday 25 January, 2025



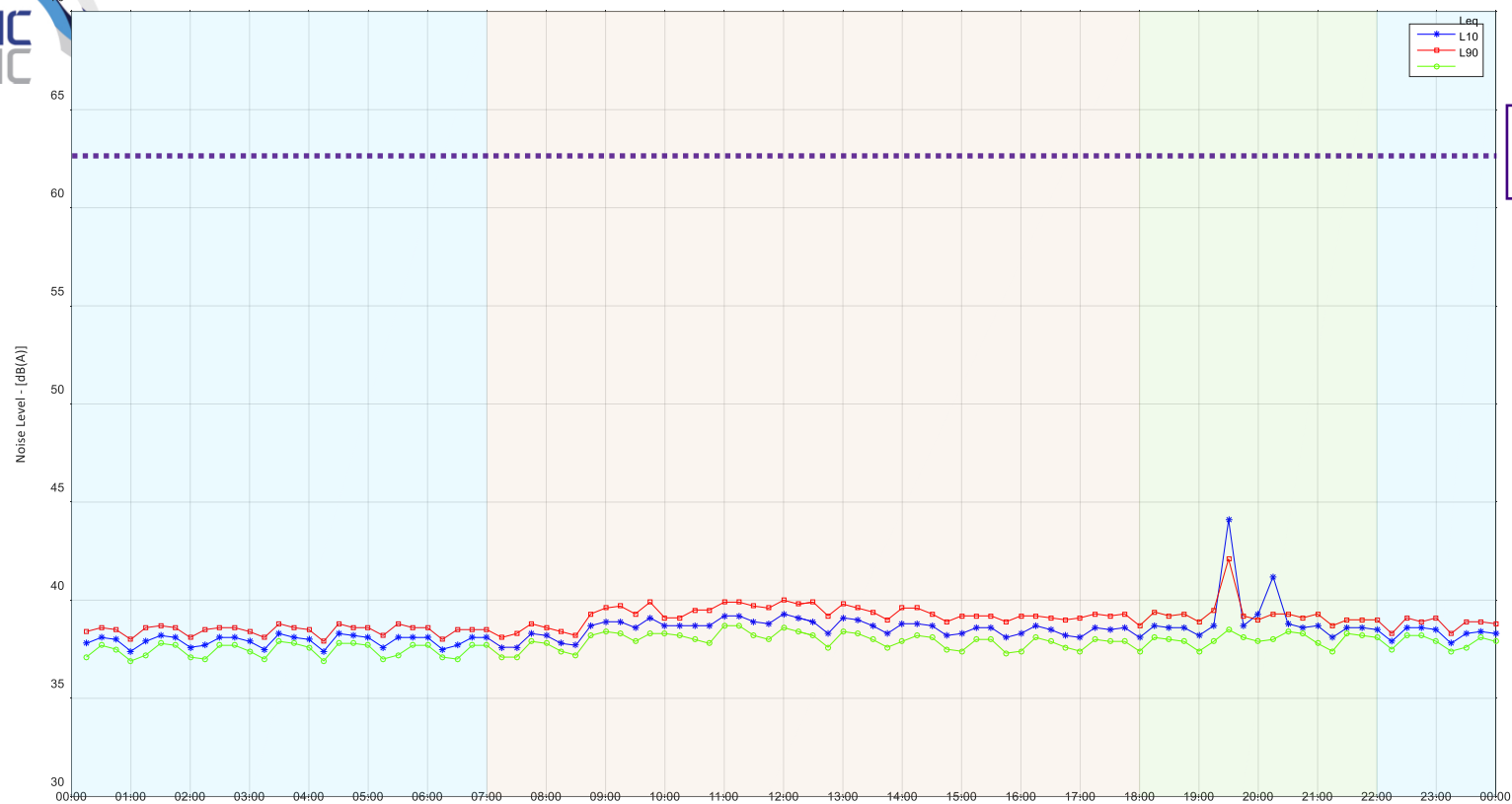
Animal Housing / Breeding /  
Observation Room NML  
 $\leq 62\text{dB(A)}L_{eq}$

# Centenary Institute - Level 02 Office: Sunday 26 January, 2025



Animal Housing / Breeding /  
Observation Room NML  
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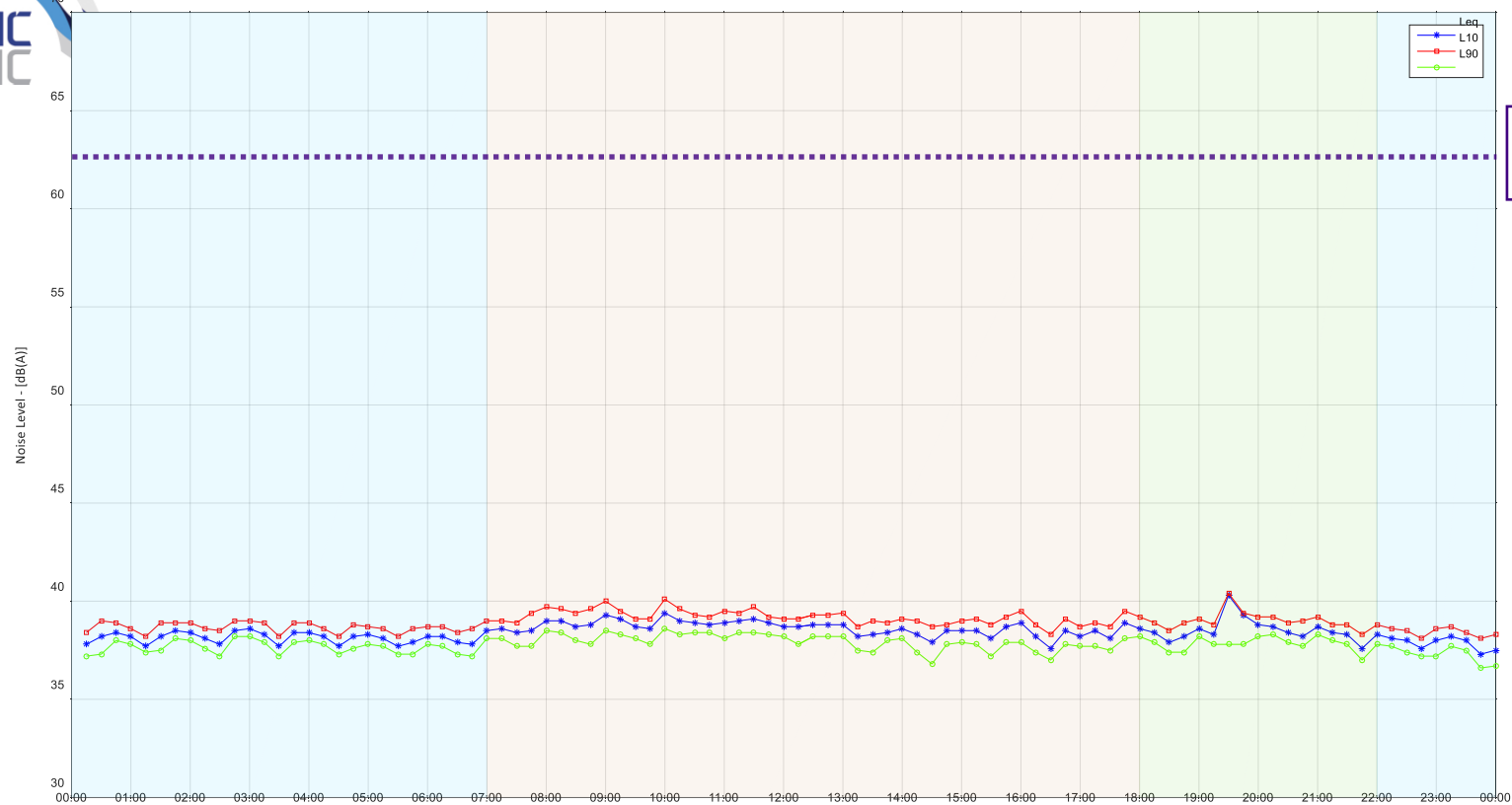
# Centenary Institute - Level 02 Office: Monday 27 January, 2025



Animal Housing / Breeding /  
Observation Room NML  
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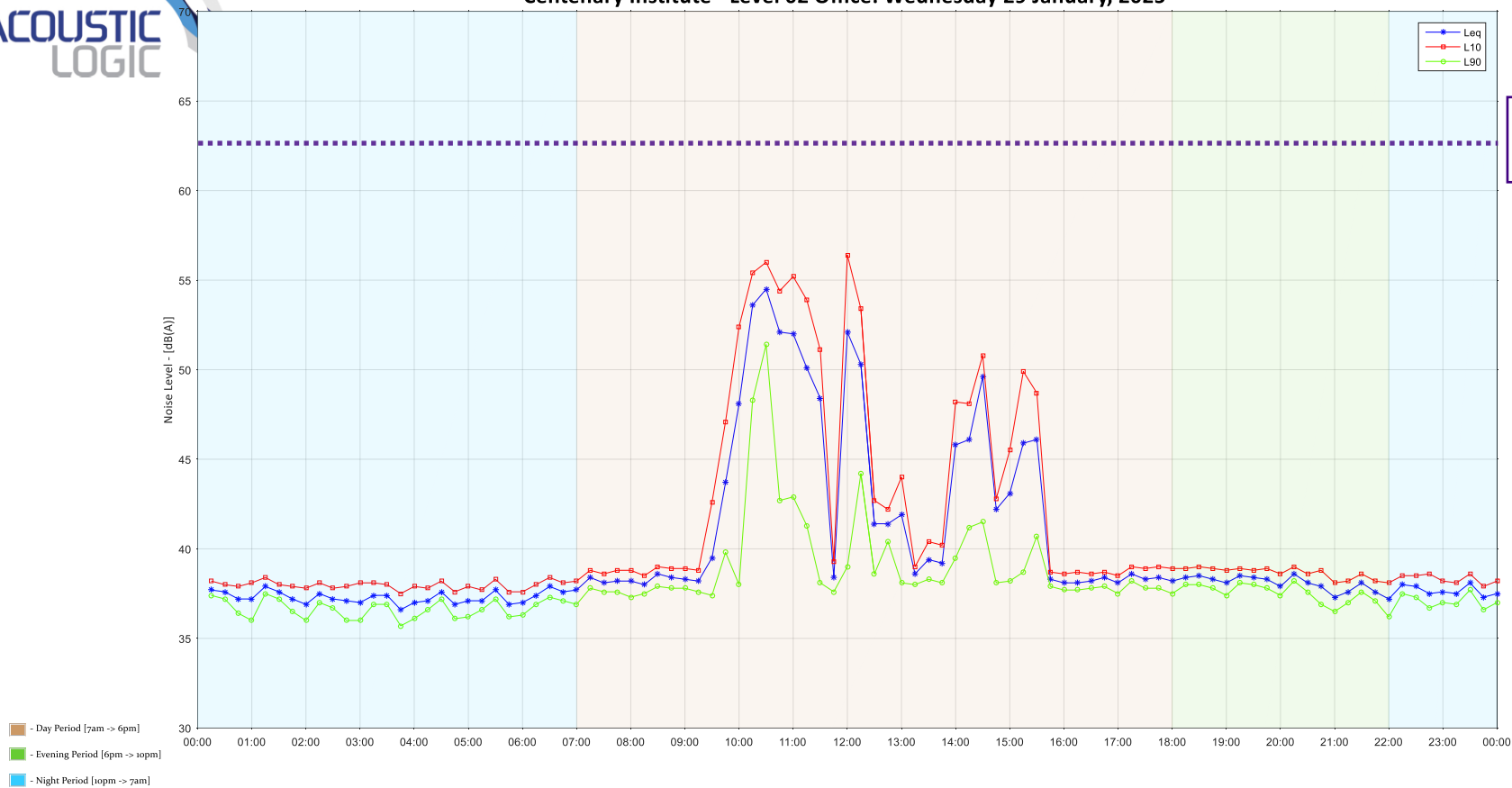
# Centenary Institute - Level 02 Office: Tuesday 28 January, 2025



Animal Housing / Breeding /  
Observation Room NML  
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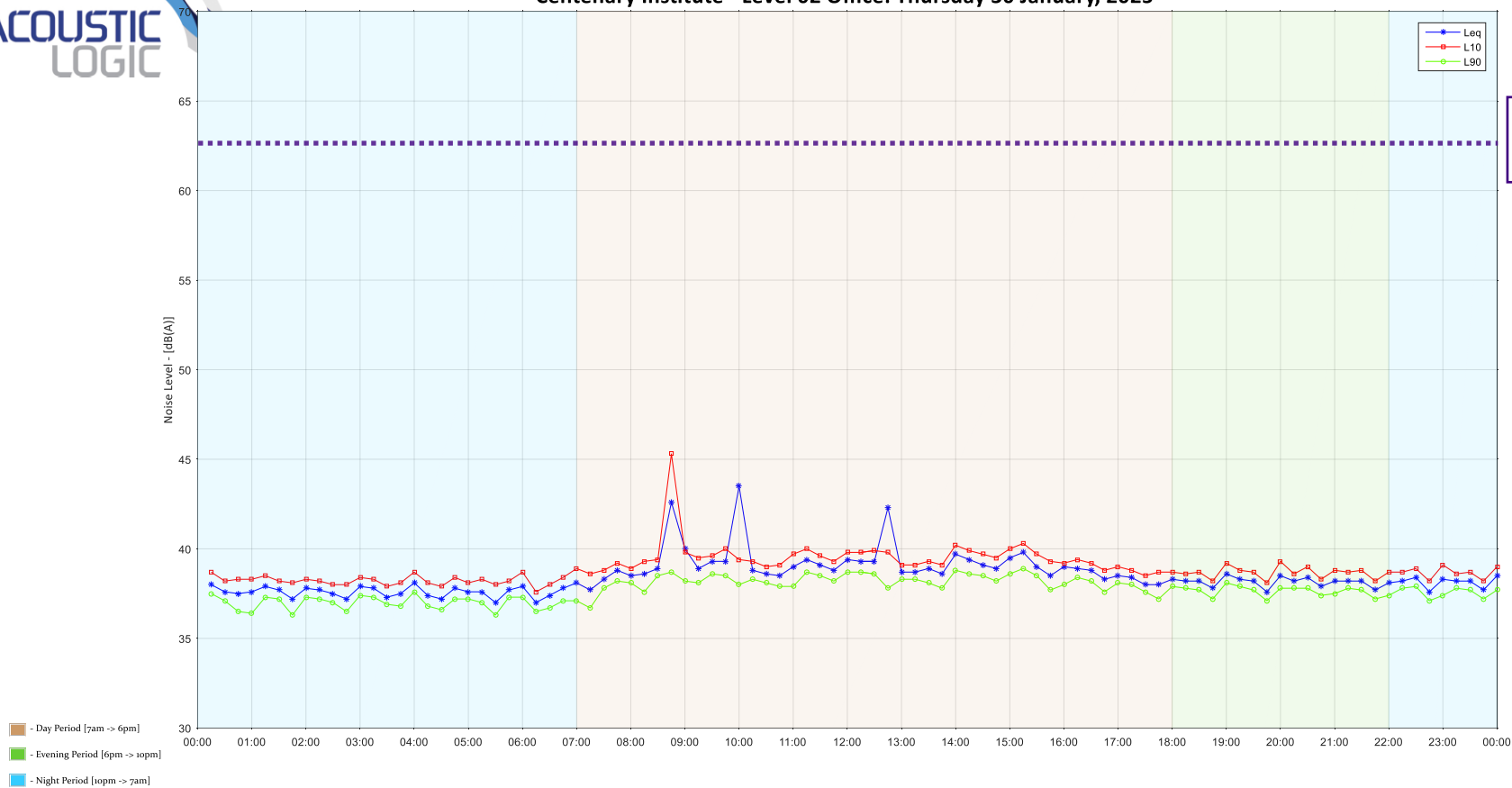


# Centenary Institute - Level 02 Office: Wednesday 29 January, 2025



Animal Housing / Breeding /  
Observation Room NML  
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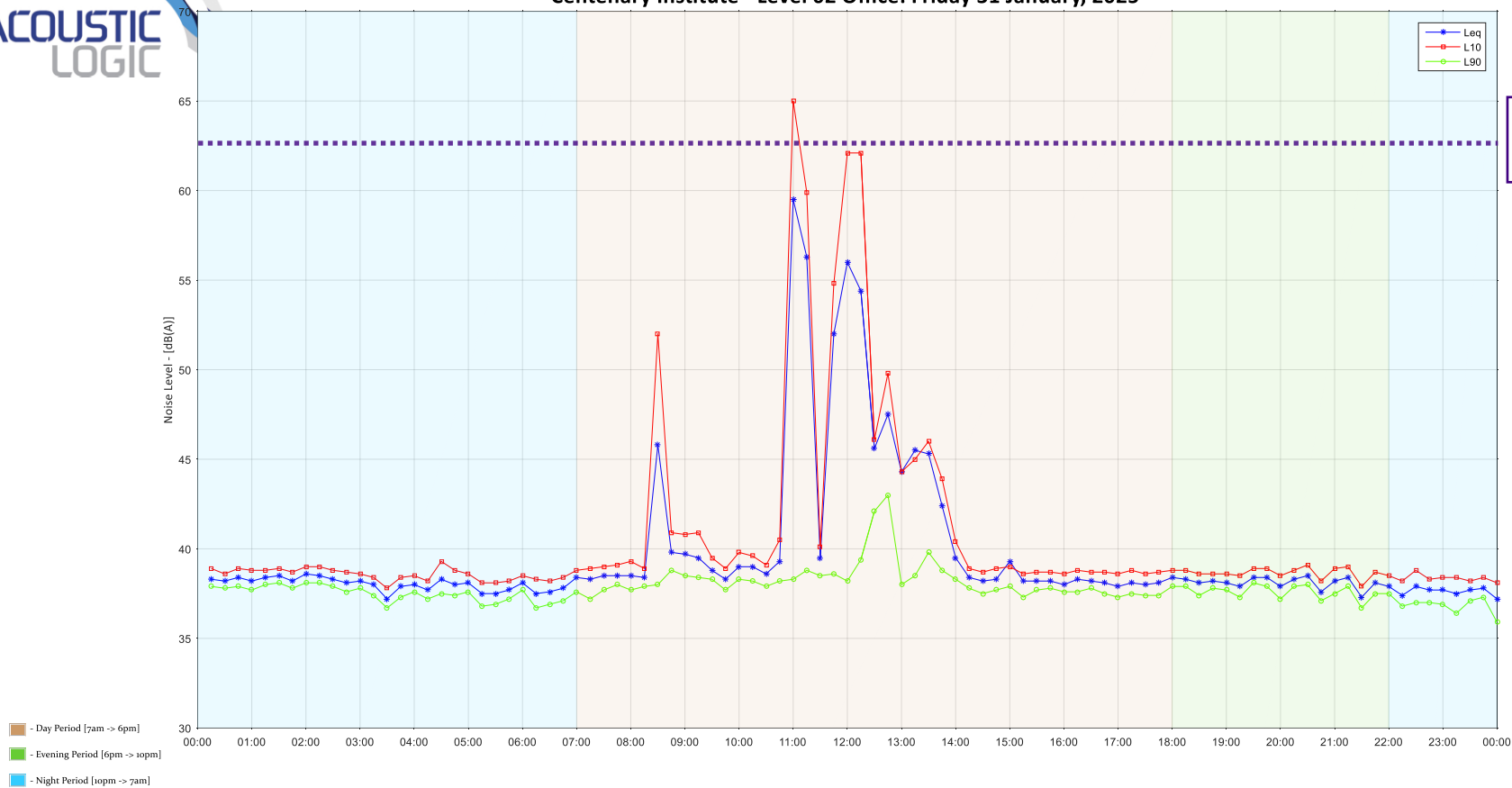
# Centenary Institute - Level 02 Office: Thursday 30 January, 2025



Animal Housing / Breeding /  
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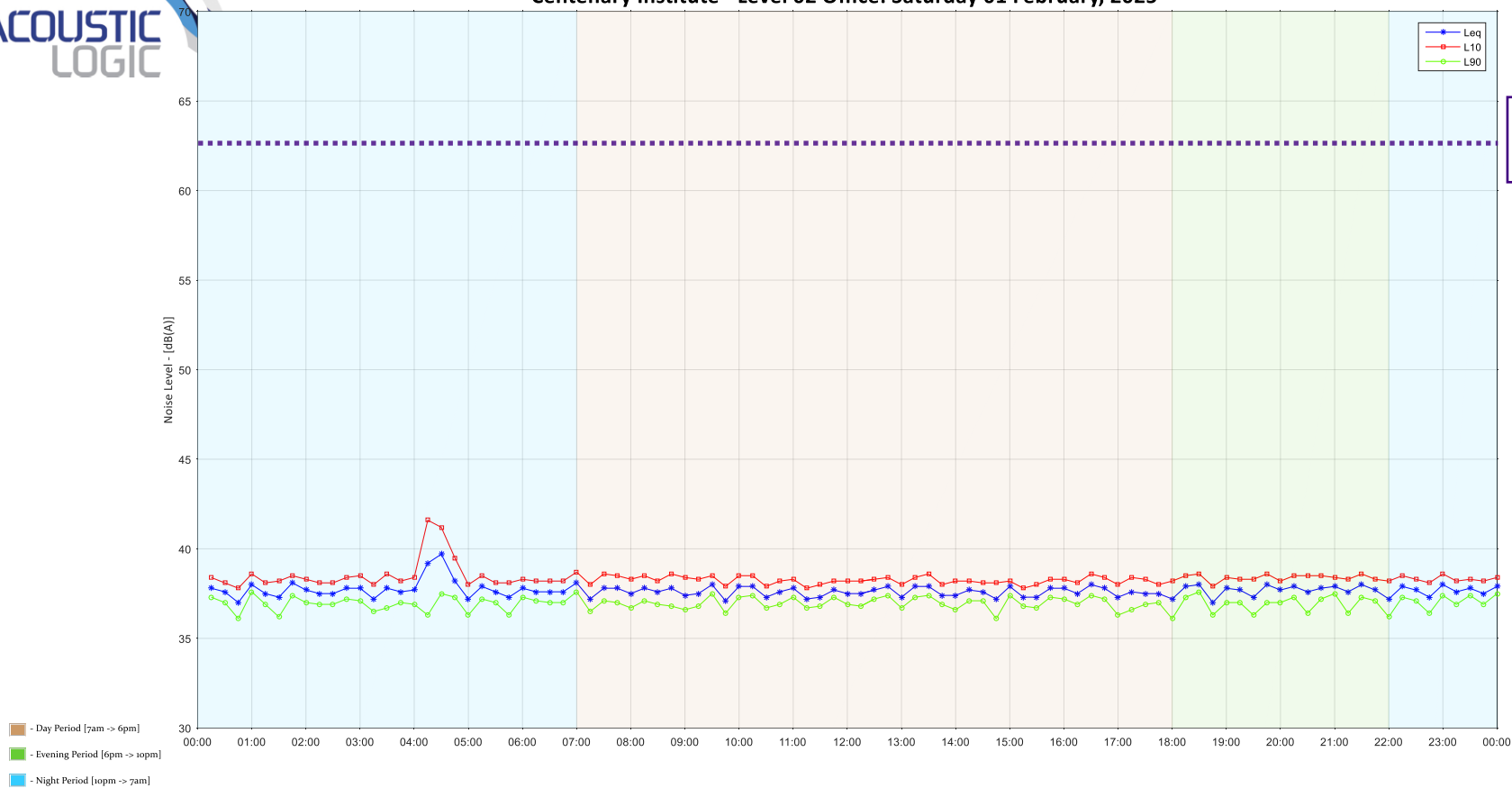


# Centenary Institute - Level 02 Office: Friday 31 January, 2025



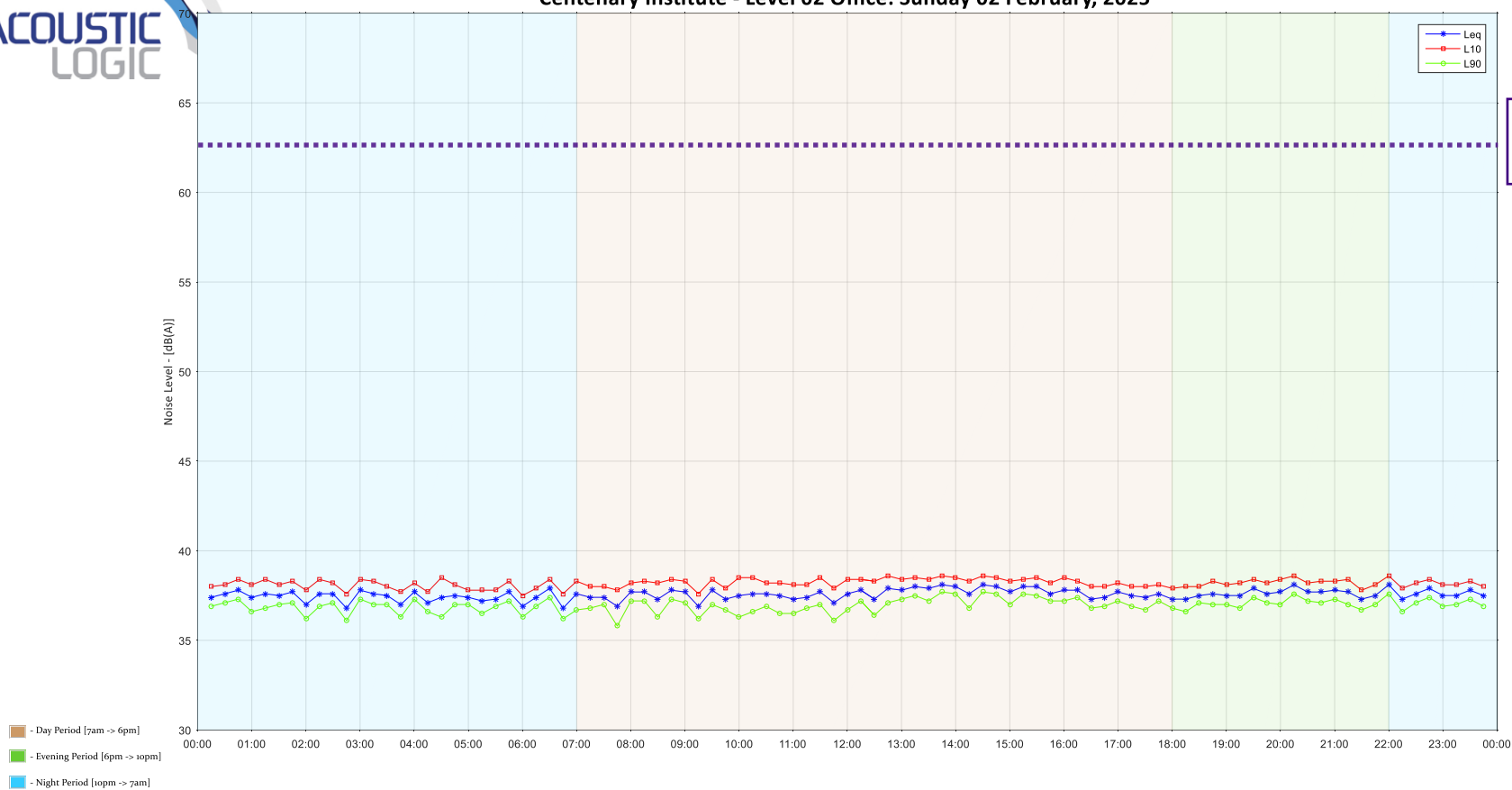
Animal Housing / Breeding /  
Observation Room NML  
 $\leq 62\text{dB(A)}L_{eq}$

Centenary Institute - Level 02 Office: Saturday 01 February, 2025



Animal Housing / Breeding /  
Observation Room NML  
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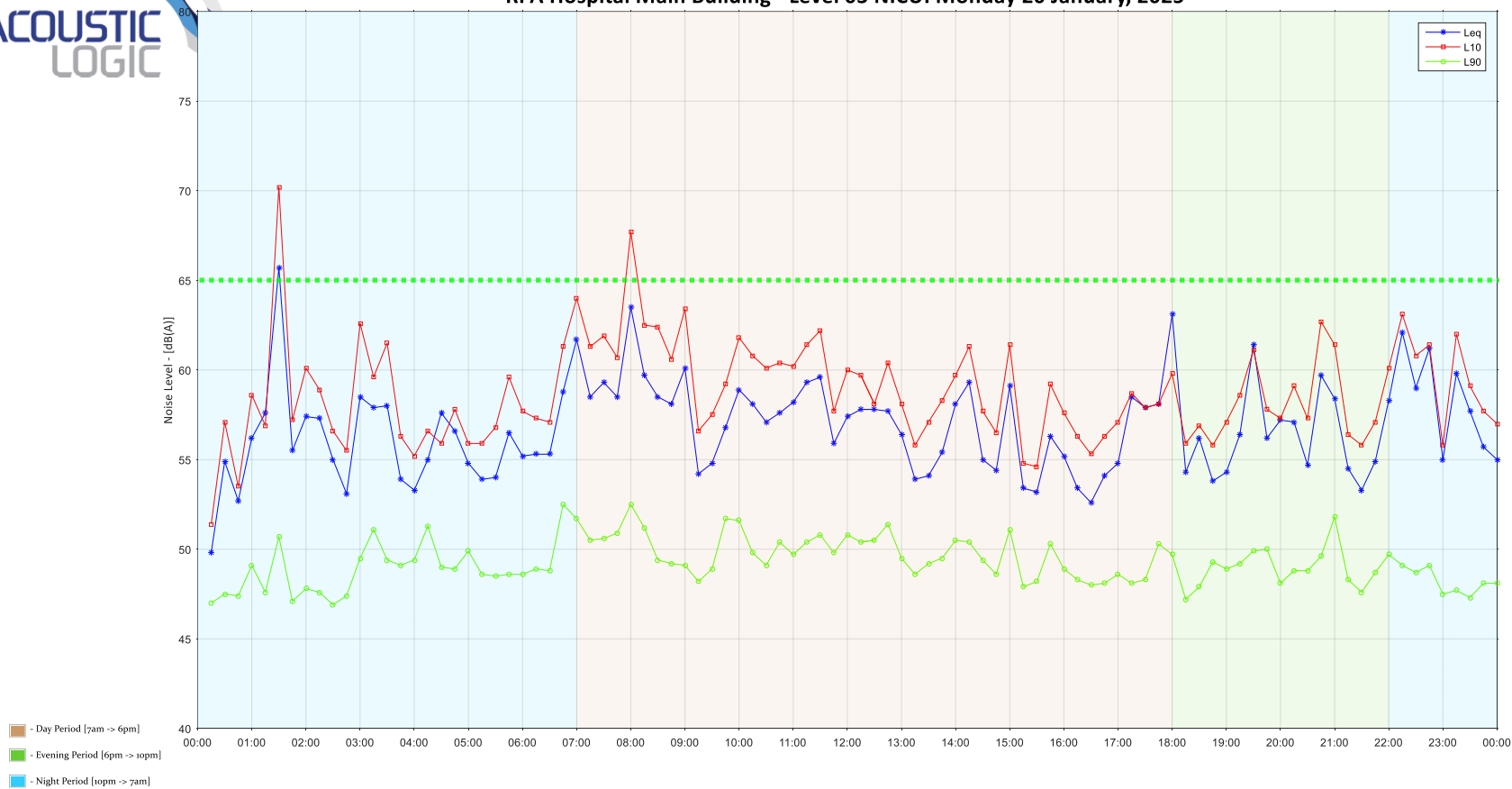
# Centenary Institute - Level 02 Office: Sunday 02 February, 2025



Animal Housing / Breeding /  
Observation Room NML  
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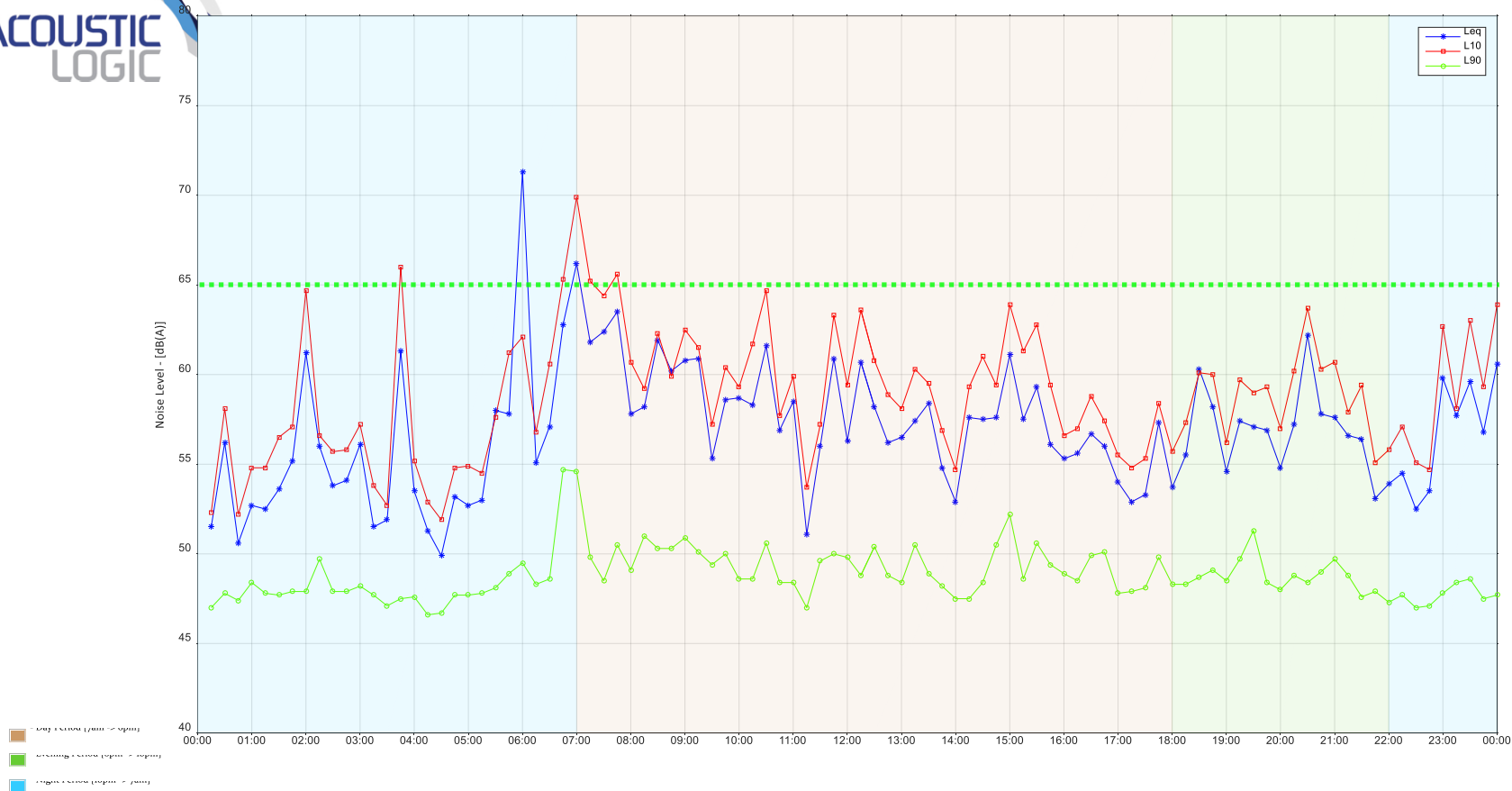
## RPA HOSPITAL MAIN BUILDING – LEVEL 3 NICU

# RPA Hospital Main Building - Level 03 NICU: Monday 20 January, 2025



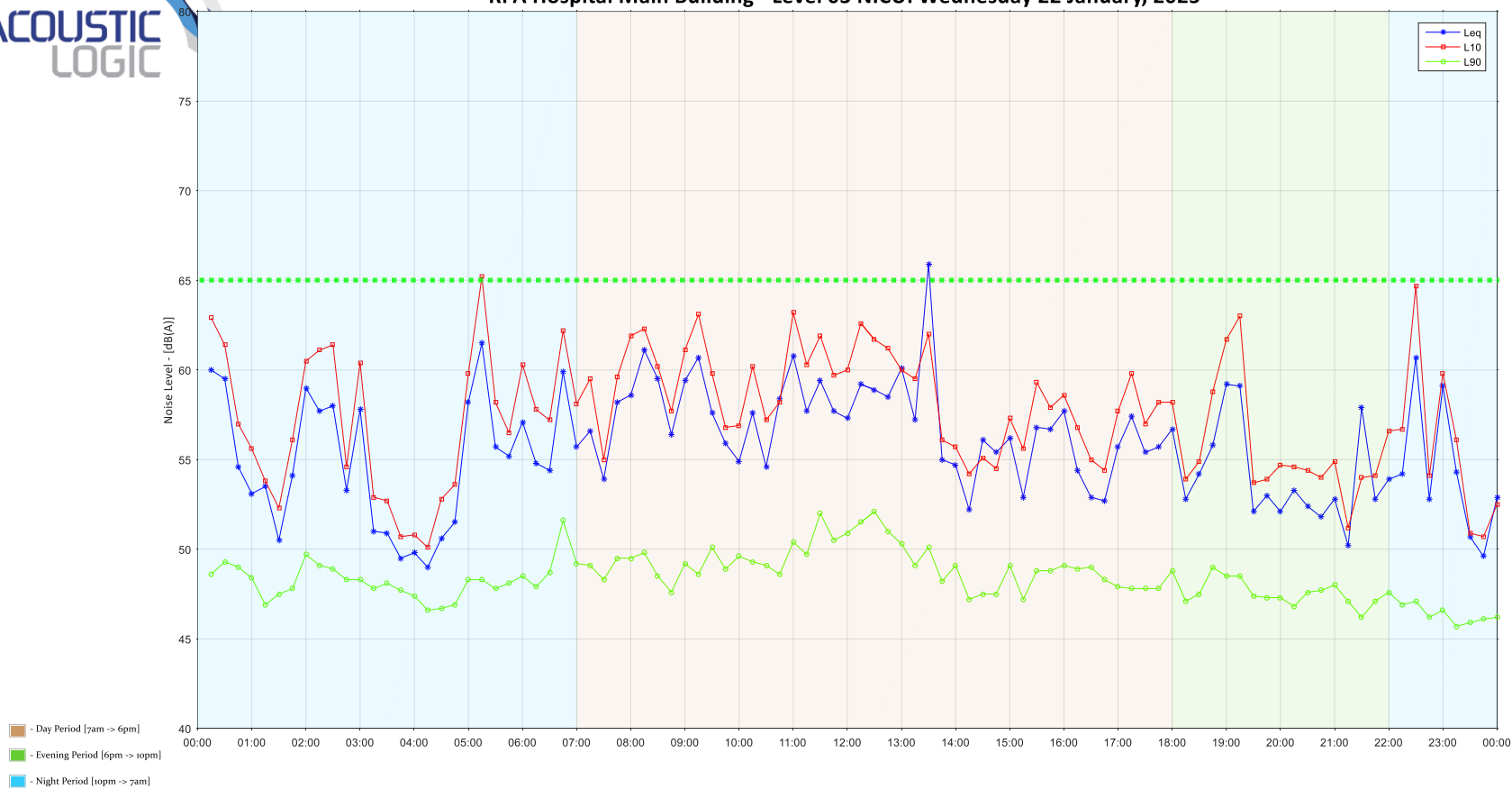
**NICU NML**  
(Including correction)  
 $\leq 65\text{dB(A)}_{L_{eq}}$

# RPA Hospital Main Building - Level 03 NICU: Tuesday 21 January, 2025



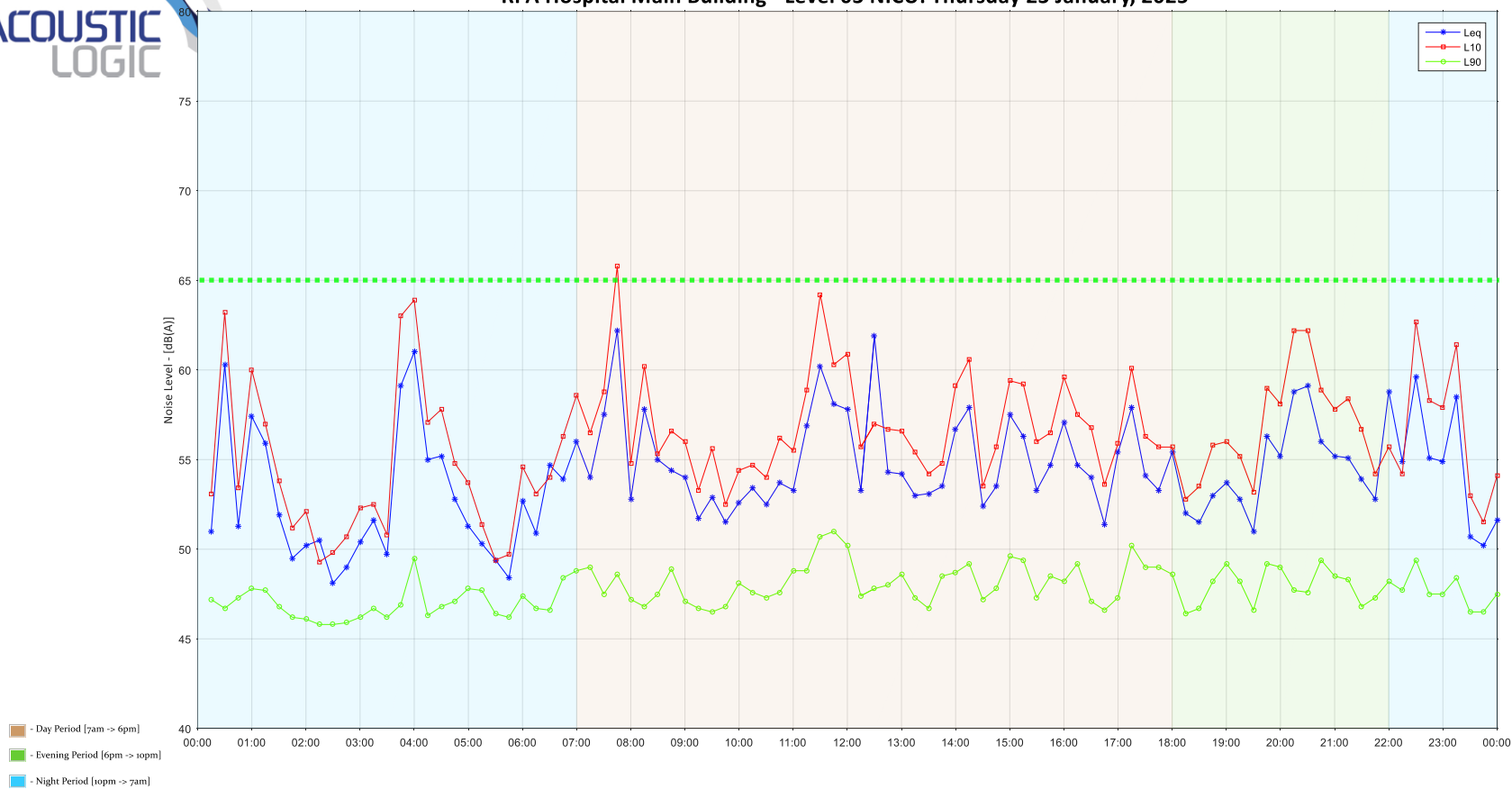
NICU NML  
(Including correction)  
 $\leq 65\text{dB(A)}_{L_{eq}}$

# RPA Hospital Main Building - Level 03 NICU: Wednesday 22 January, 2025



**NICU NML**  
(Including correction)  
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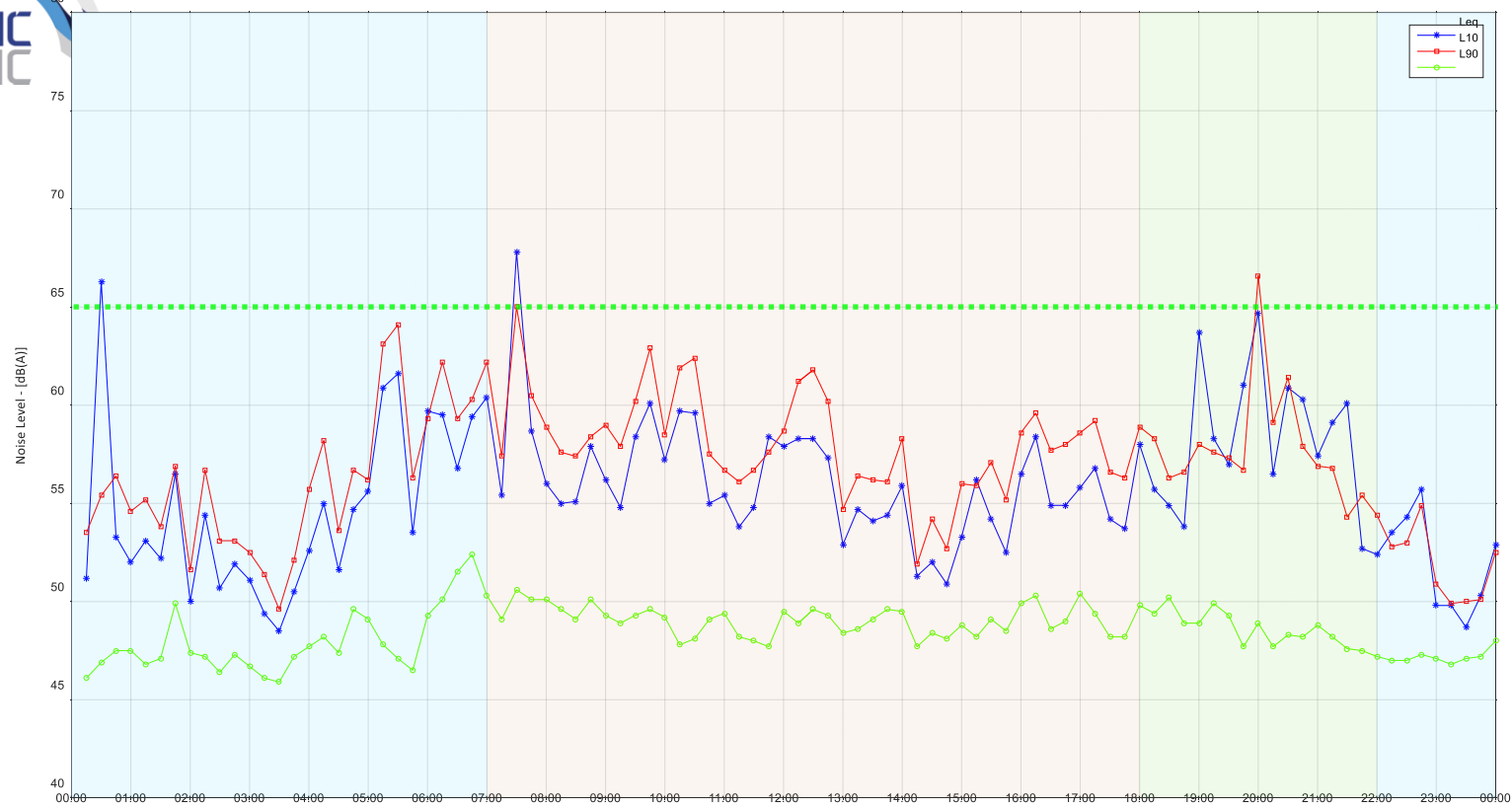
# RPA Hospital Main Building - Level 03 NICU: Thursday 23 January, 2025



**NICU NML**  
(Including correction)  
 $\leq 65\text{dB(A)}_{L_{eq}}$



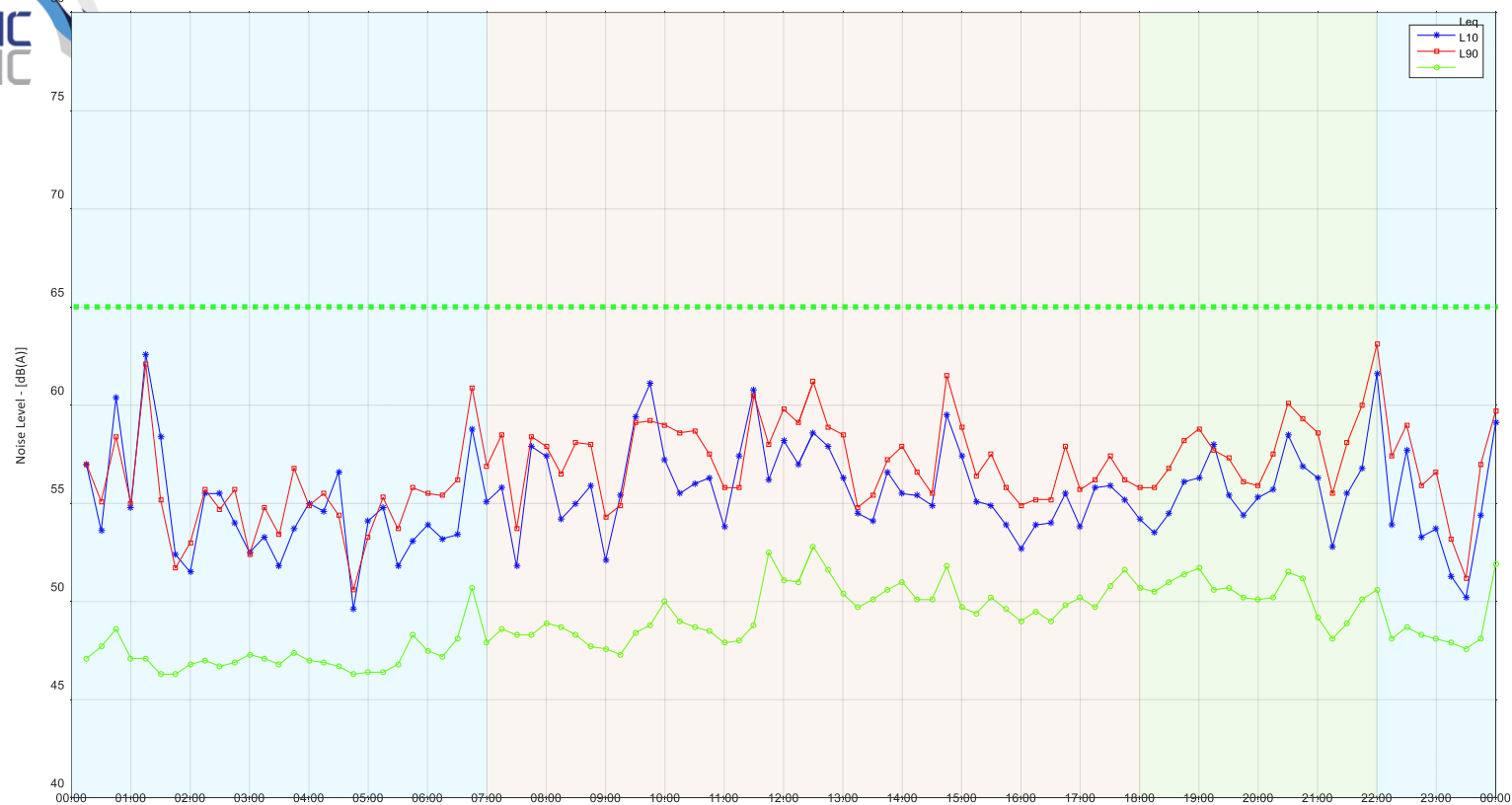
# RPA Hospital Main Building - Level 03 NICU: Friday 24 January, 2025



NICU NML  
(Including correction)  
 $\leq 65\text{dB(A)}_{L_{eq}}$



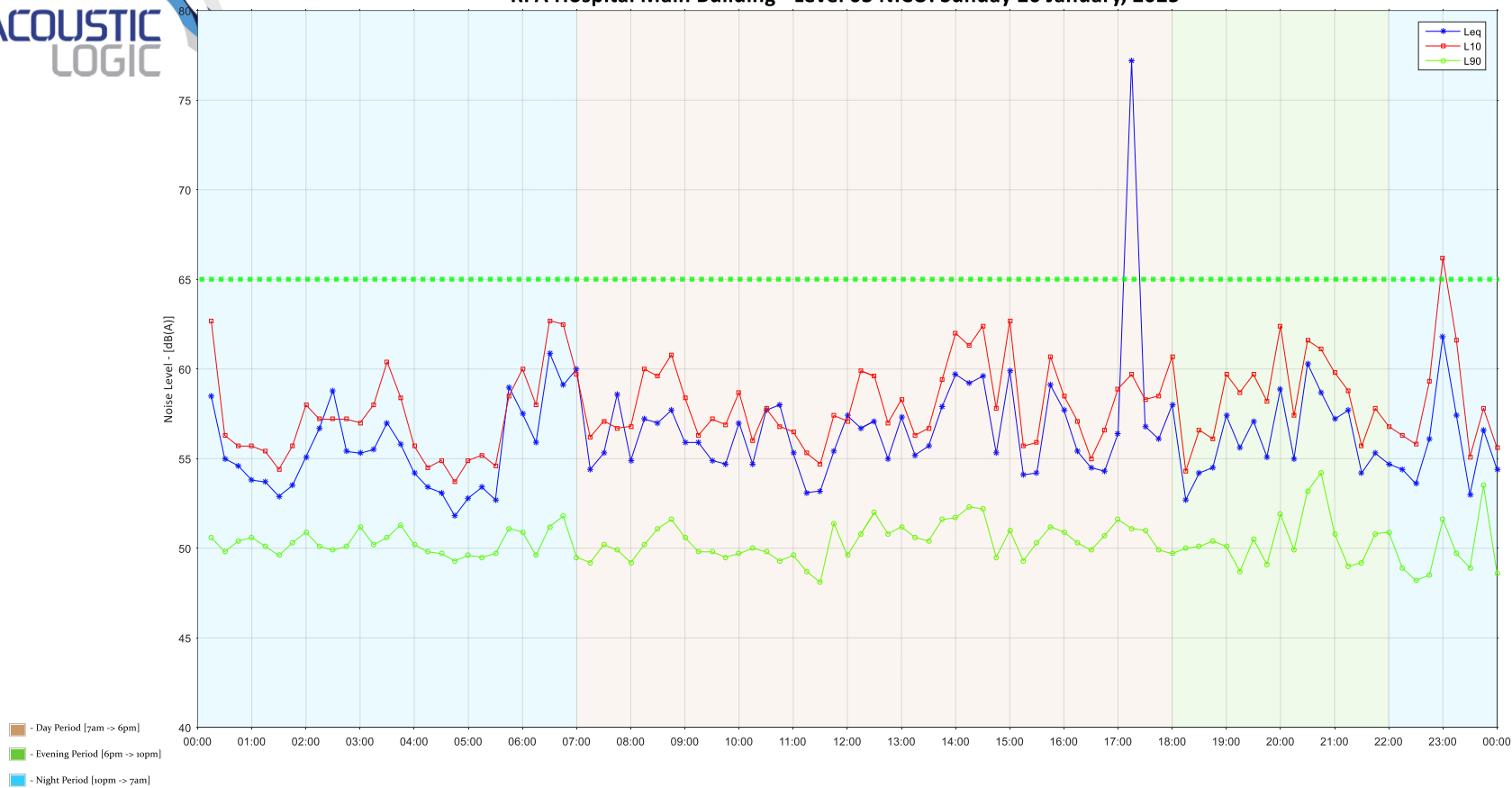
# RPA Hospital Main Building - Level 03 NICU: Saturday 25 January, 2025



NICU NML  
(Including correction)  
 $\leq 65\text{dB(A)}_{L_{eq}}$



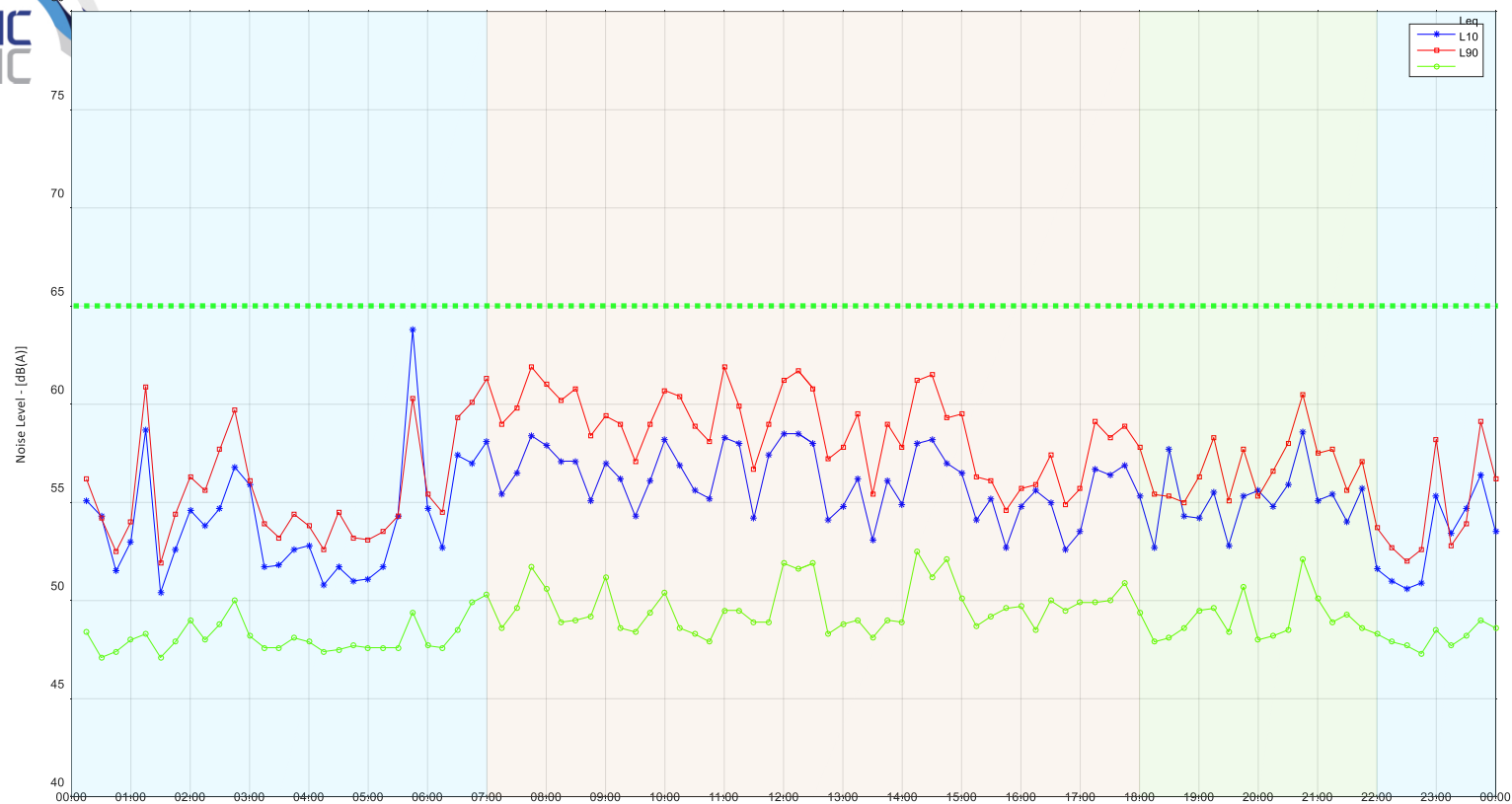
# RPA Hospital Main Building - Level 03 NICU: Sunday 26 January, 2025



NICU NML  
(Including correction)  
 $\leq 65\text{dB(A)}L_{eq}$

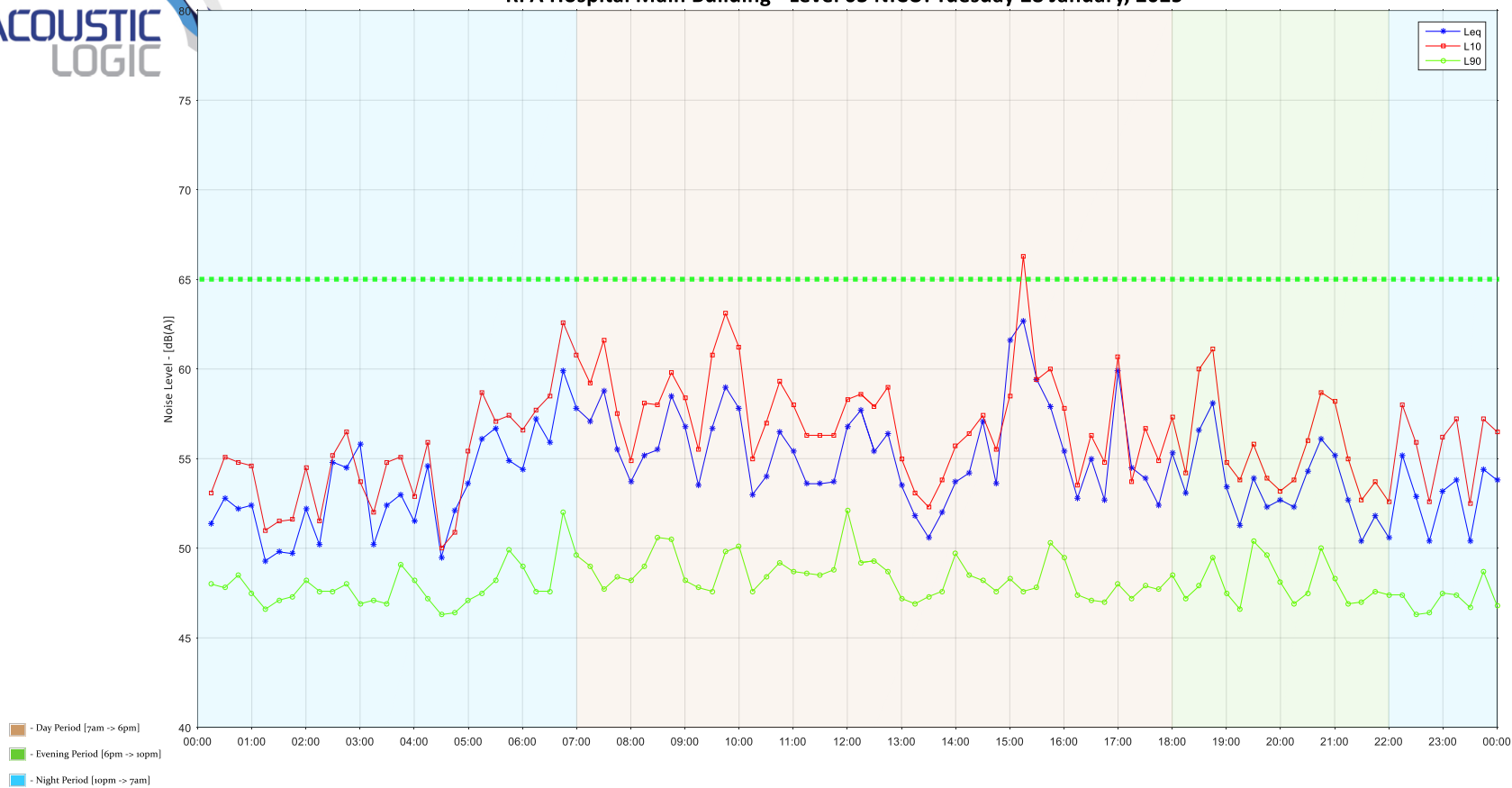


# RPA Hospital Main Building - Level 03 NICU: Monday 27 January, 2025



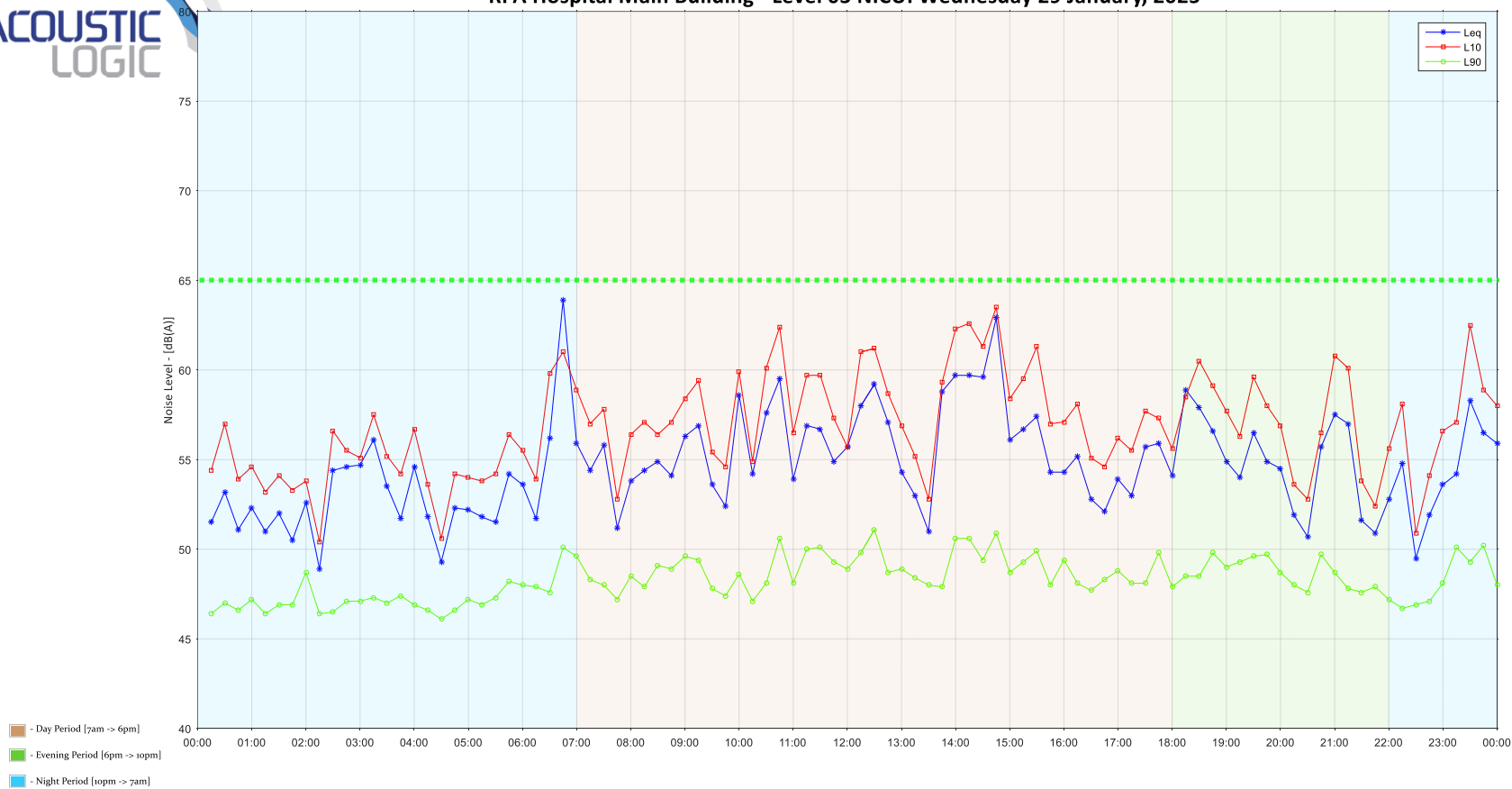
NICU NML  
(Including correction)  
 $\leq 65\text{dB(A)}_{L_{eq}}$

# RPA Hospital Main Building - Level 03 NICU: Tuesday 28 January, 2025



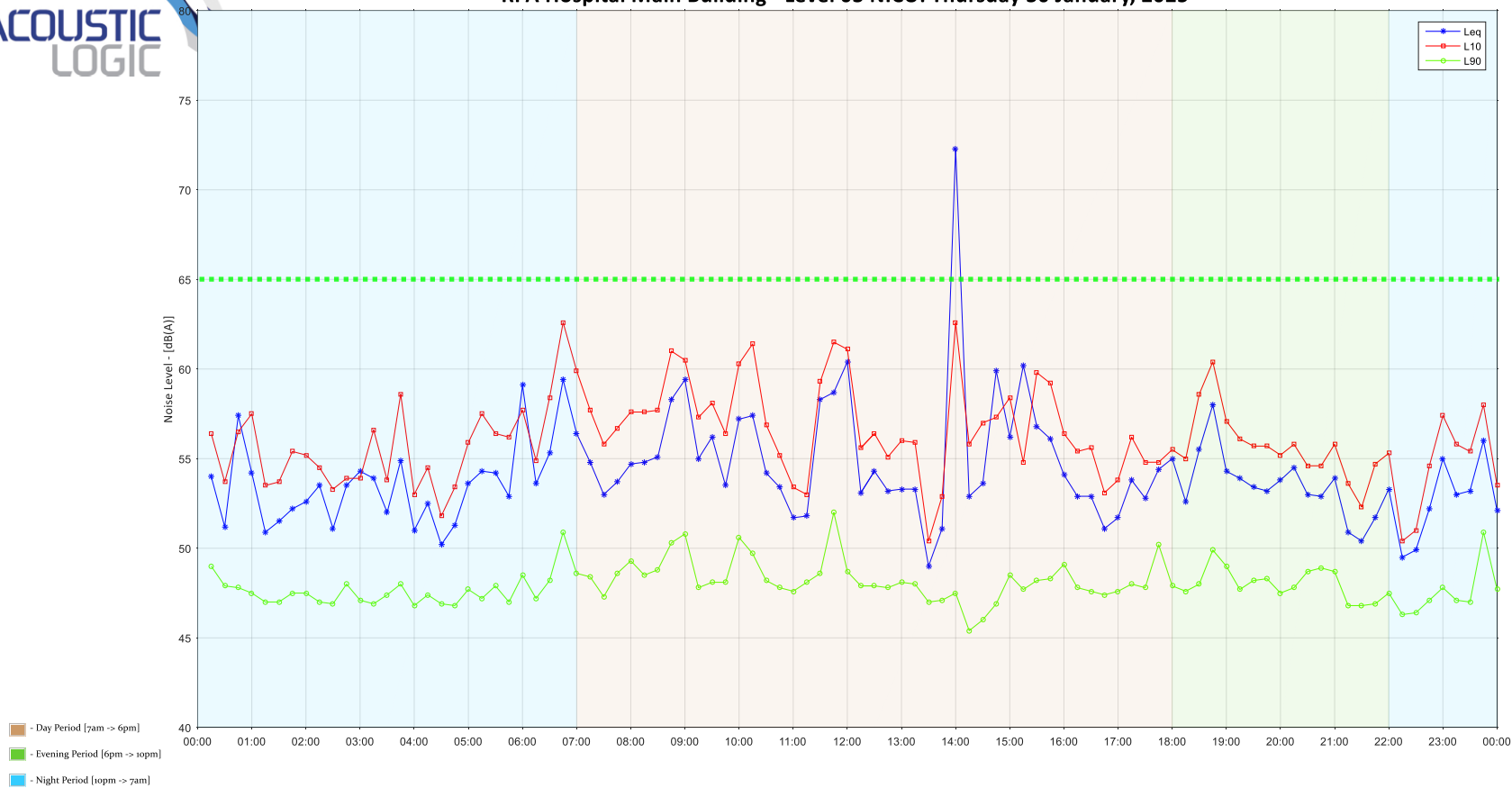
**NICU NML**  
 (Including correction)  
 $\leq 65\text{dB(A)}_{L_{eq}}$

# RPA Hospital Main Building - Level 03 NICU: Wednesday 29 January, 2025



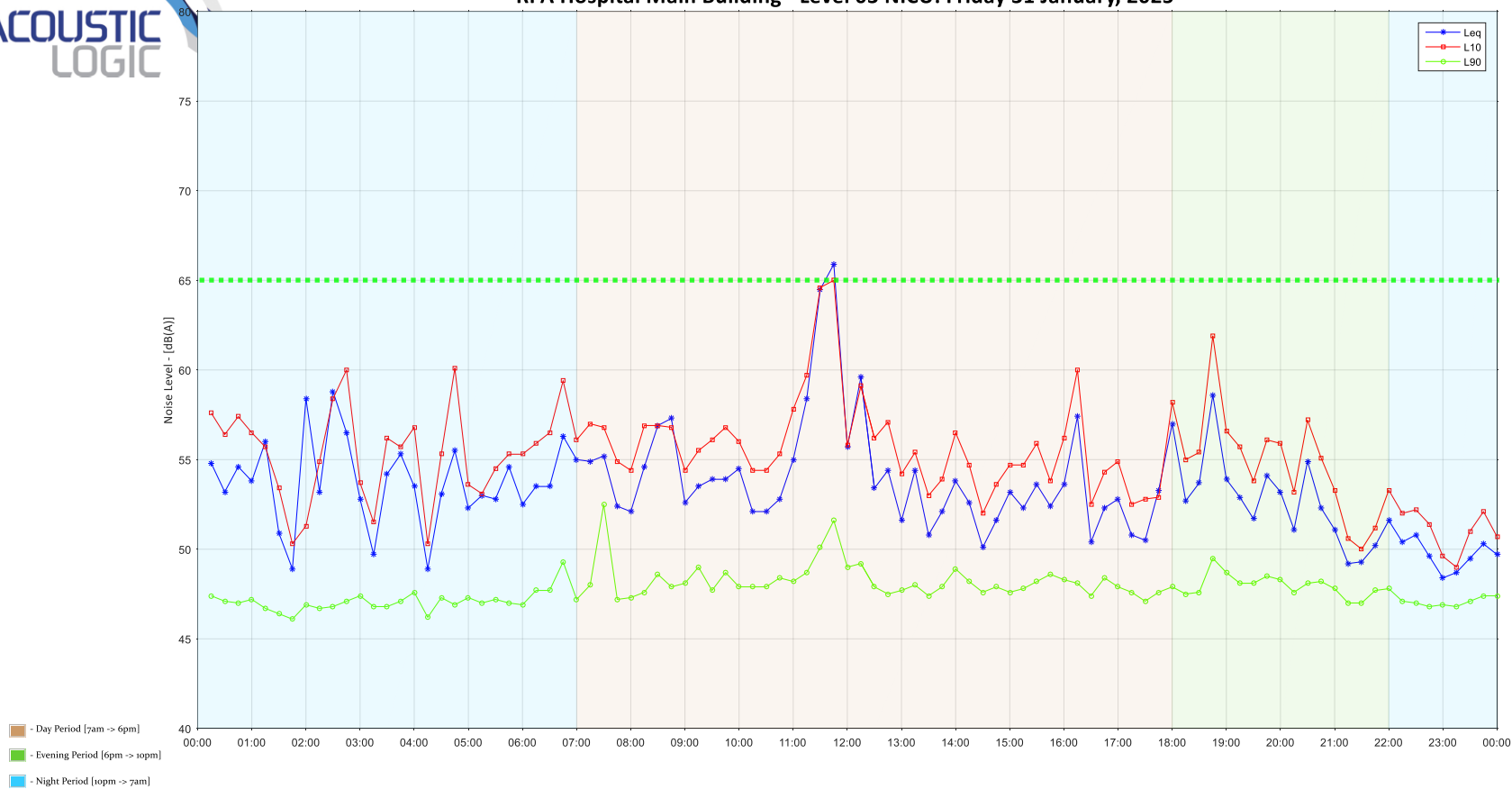
**NICU NML**  
(Including correction)  
 $\leq 65\text{dB(A)}_{L_{eq}}$

# RPA Hospital Main Building - Level 03 NICU: Thursday 30 January, 2025



**NICU NML**  
(Including correction)  
 $\leq 65\text{dB(A)}_{L_{eq}}$

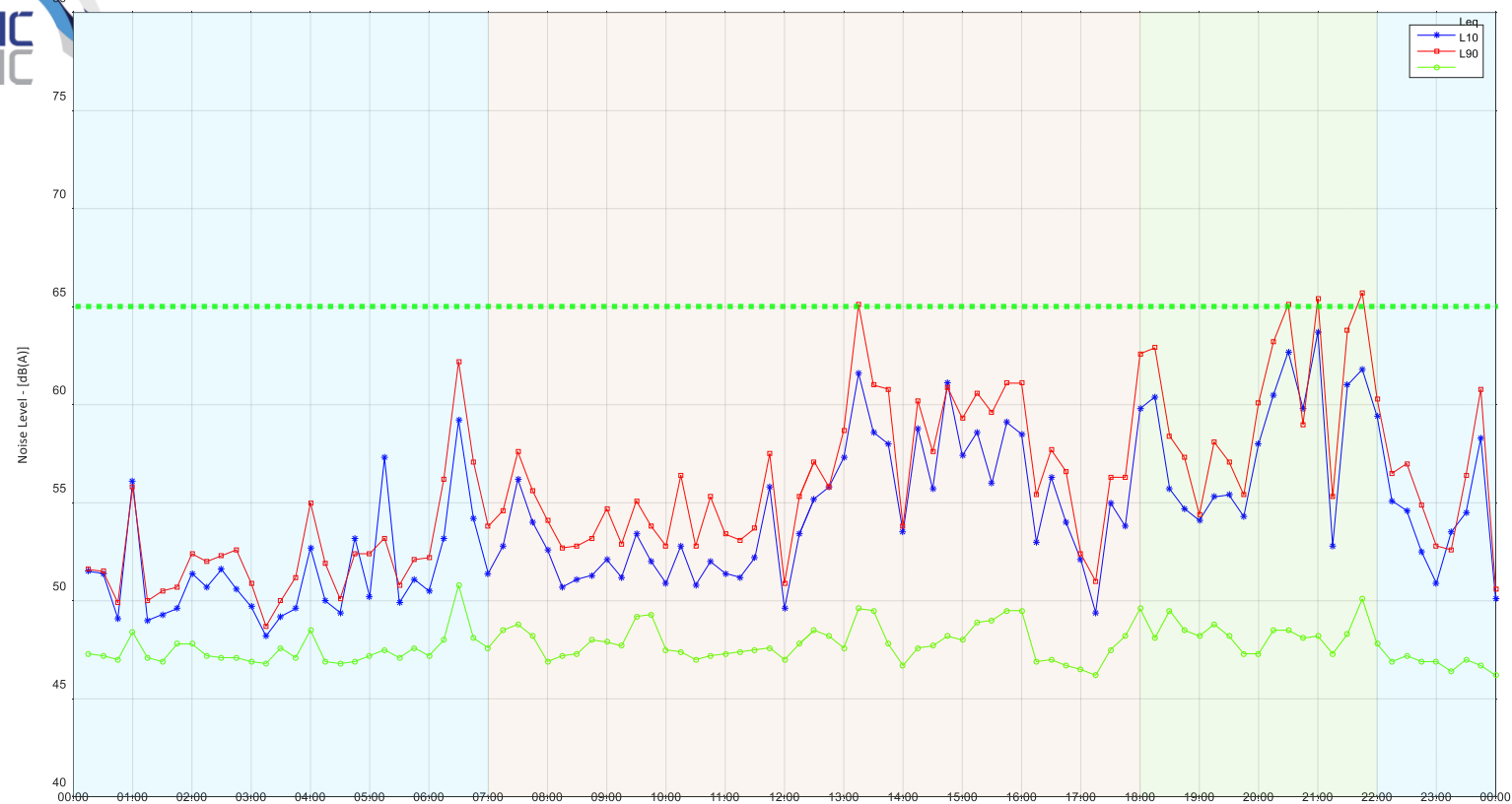
# RPA Hospital Main Building - Level 03 NICU: Friday 31 January, 2025



**NICU NML**  
(Including correction)  
 $\leq 65\text{dB(A)}_{L_{eq}}$



# RPA Hospital Main Building - Level 03 NICU: Saturday 01 February, 2025

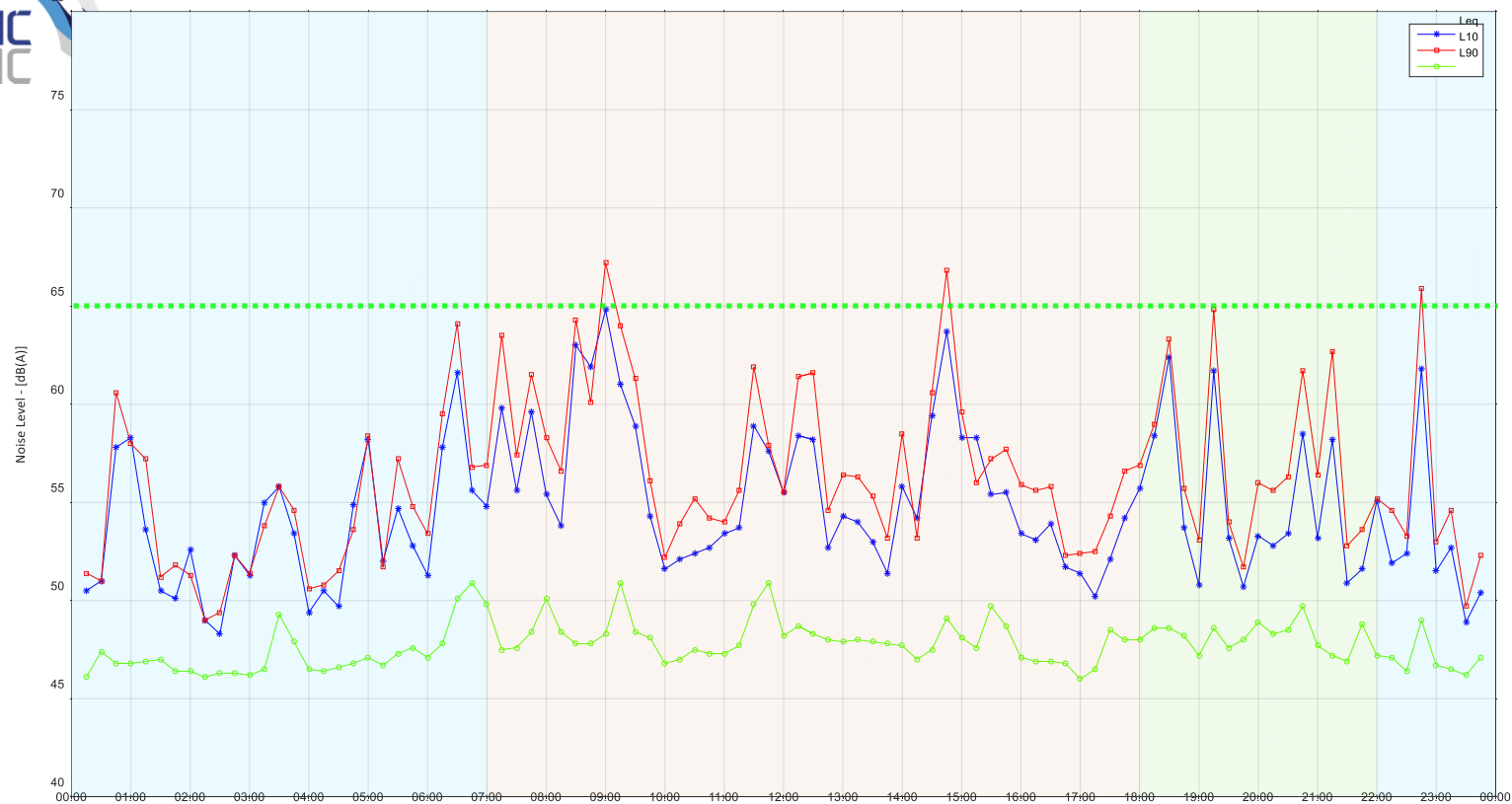


**NICU NML**  
(Including correction)  
 $\leq 65\text{dB(A)}L_{eq}$





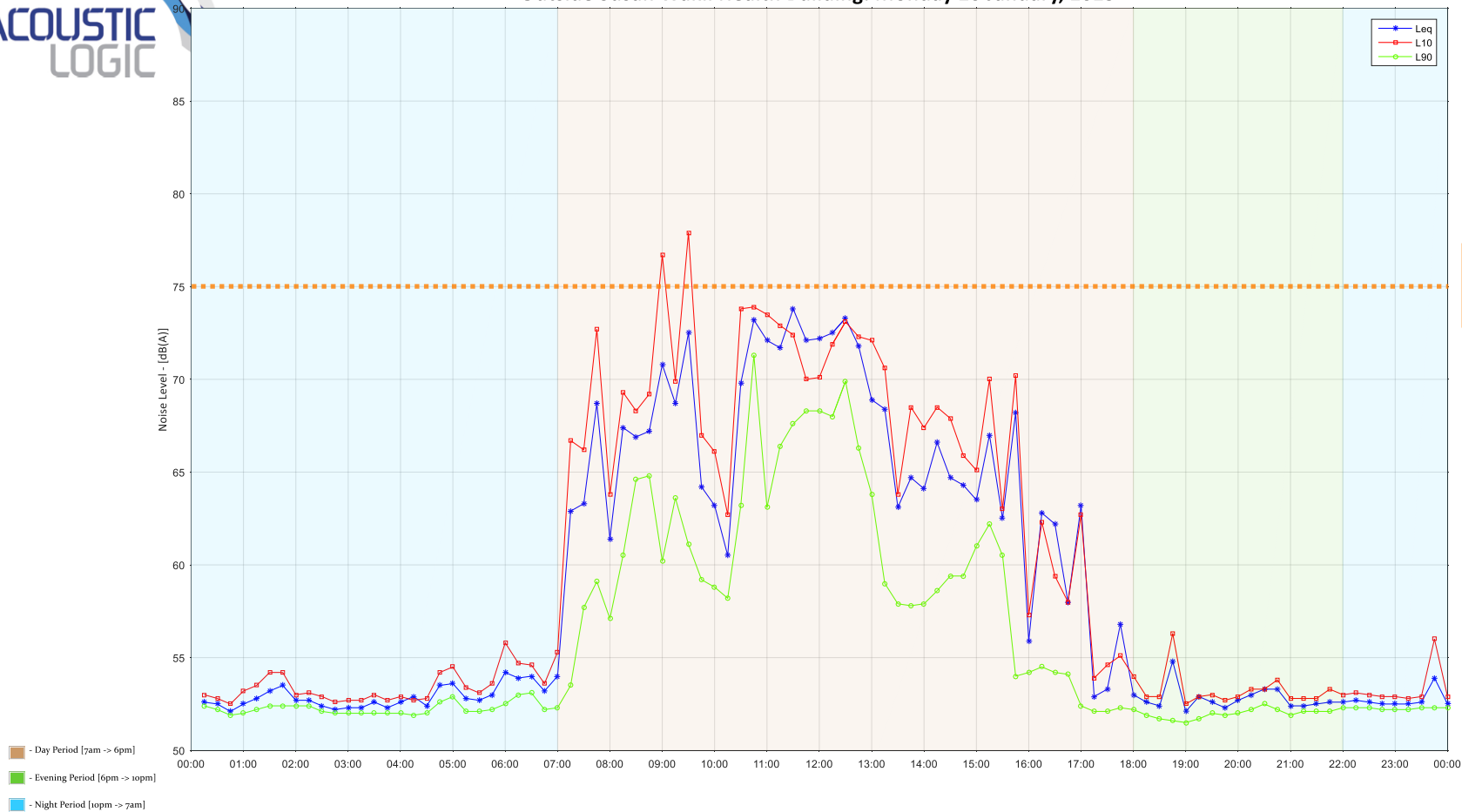
# RPA Hospital Main Building - Level 03 NICU: Sunday 02 February, 2025



NICU NML  
(Including correction)  
 $\leq 65\text{dB(A)}_{L_{eq}}$

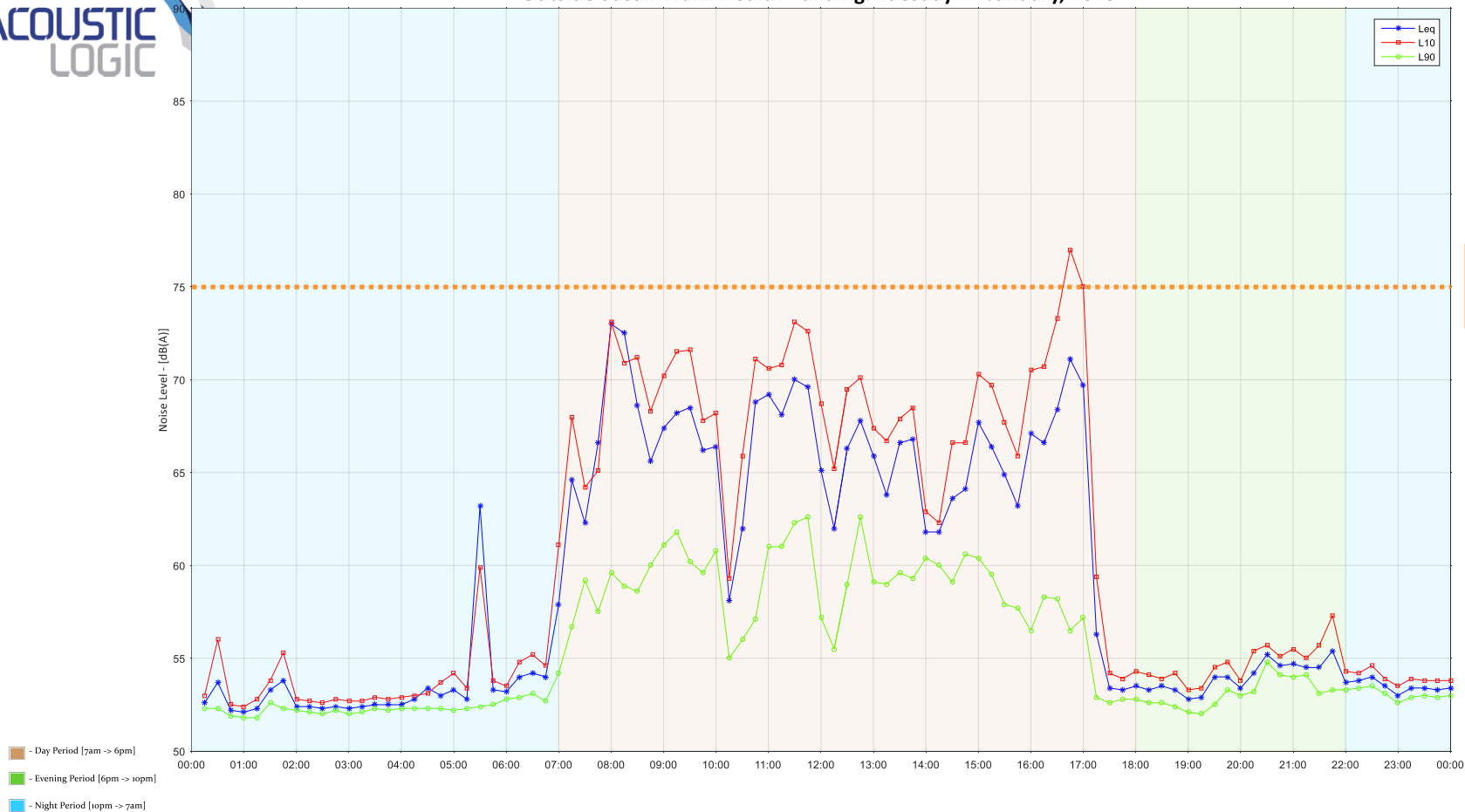
## OUTSIDE SUSAN WAKIL HEALTH BUILDING

# Outside Susan Wakil Health Building: Monday 20 January, 2025



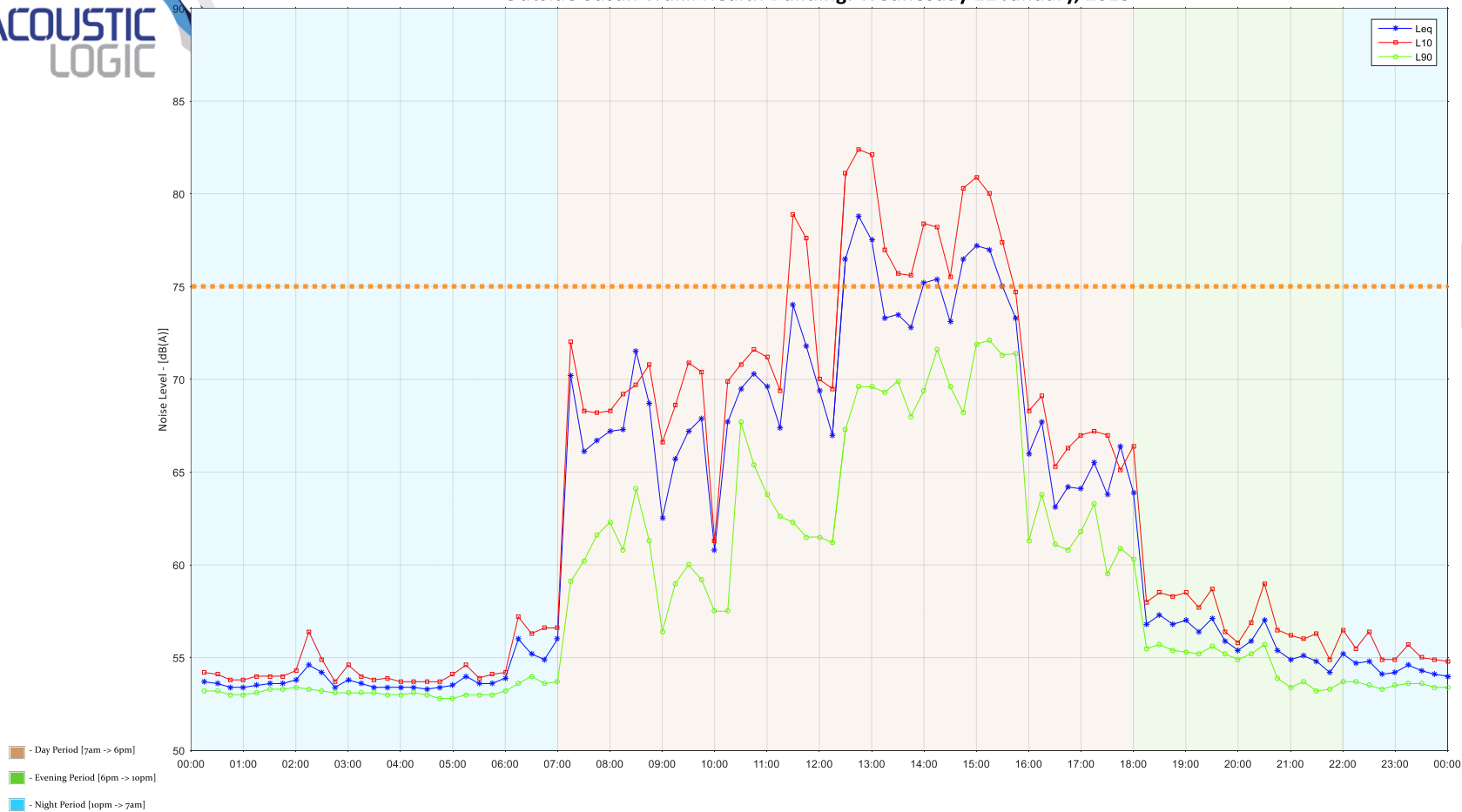
Education NML  
(Including correction)  
 $\leq 75\text{dB(A)}_{L_{eq}}$

# Outside Susan Wakil Health Building: Tuesday 21 January, 2025



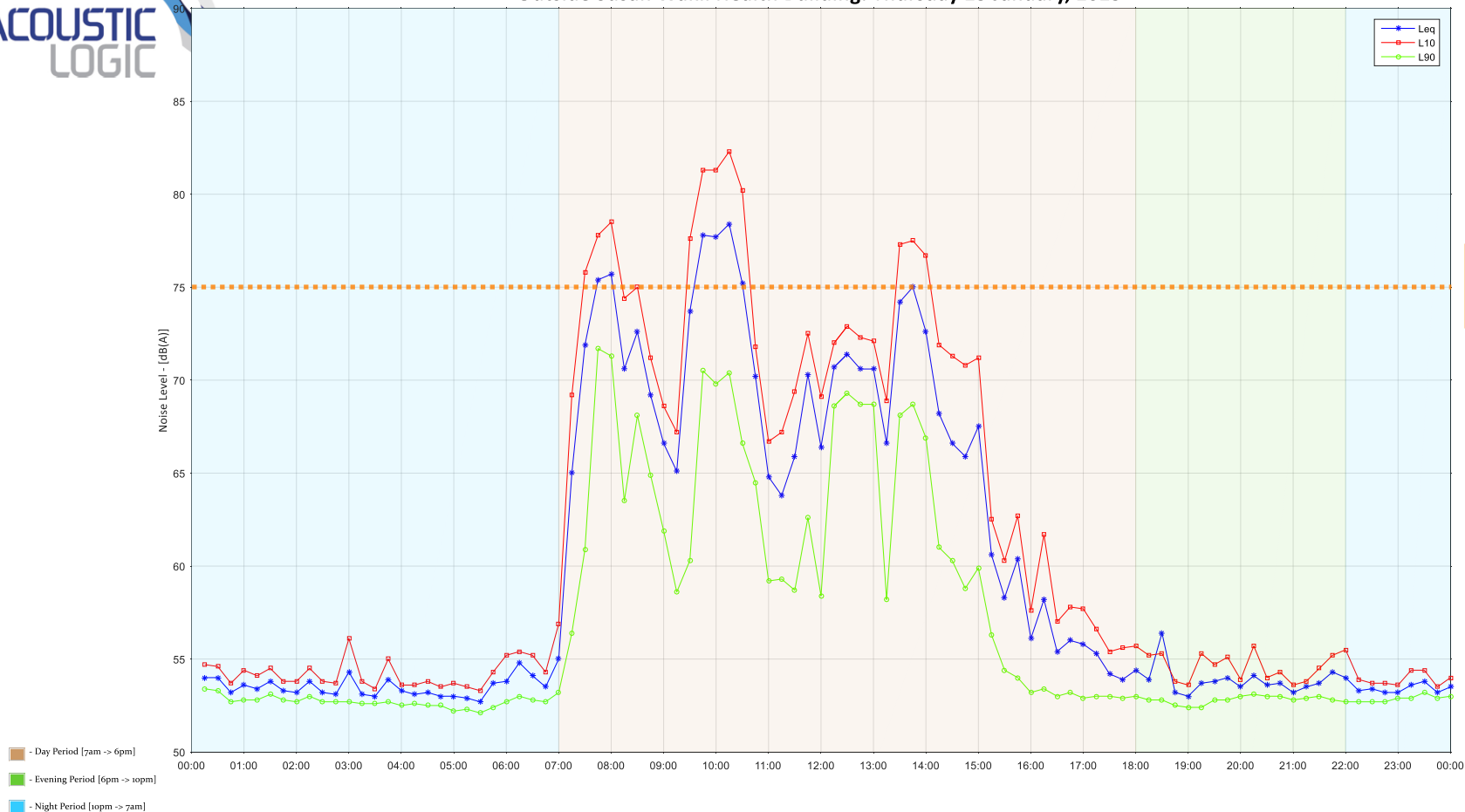
Education NML  
(Including correction)  
 $\leq 75\text{dB(A)}_{L_{eq}}$

# Outside Susan Wakil Health Building: Wednesday 22 January, 2025



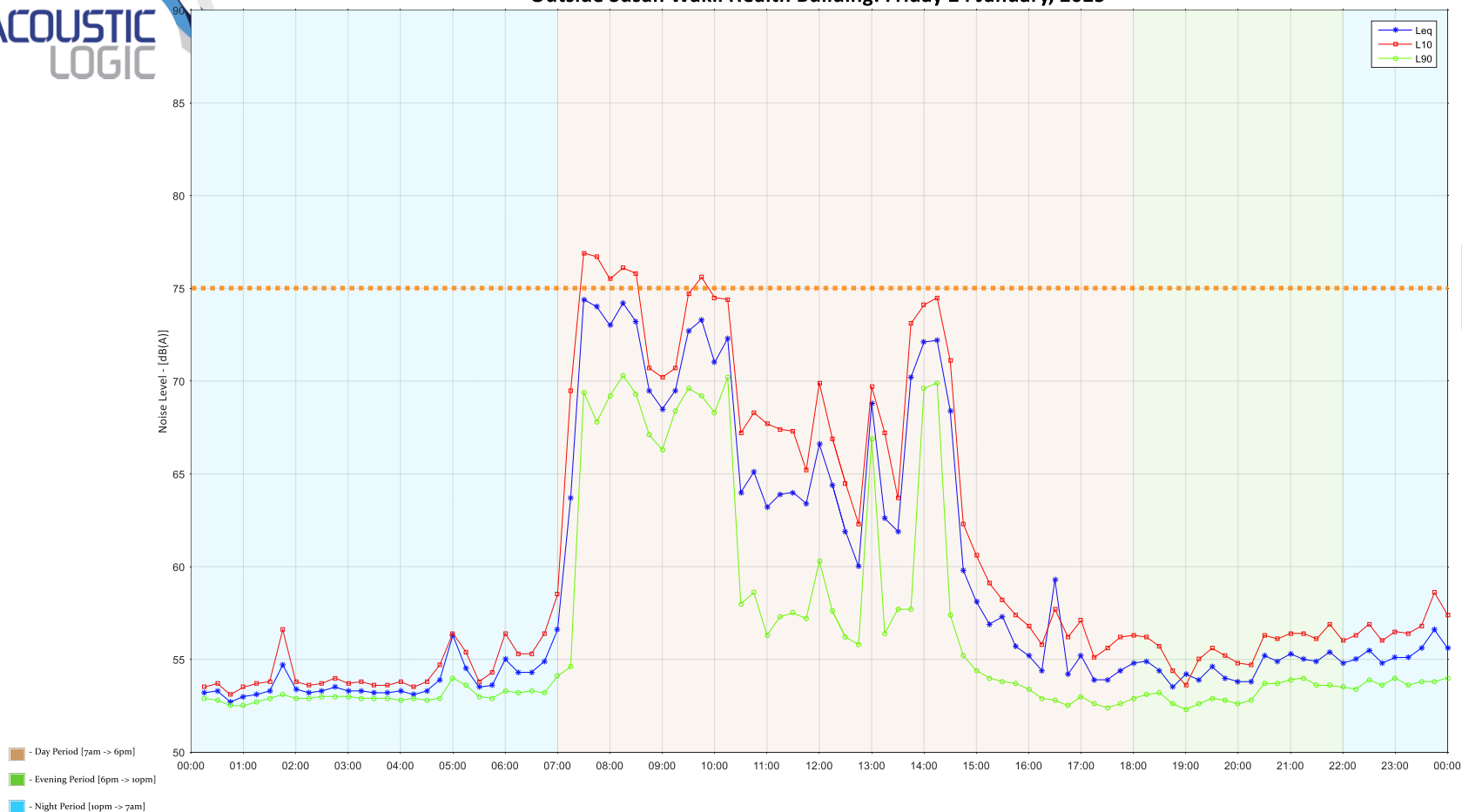
**Education NML  
(Including correction)  
 $\leq 75\text{dB(A)}_{L_{eq}}$**

# Outside Susan Wakil Health Building: Thursday 23 January, 2025



**Education NML  
(Including correction)  
 $\leq 75\text{dB(A)}_{L_{eq}}$**

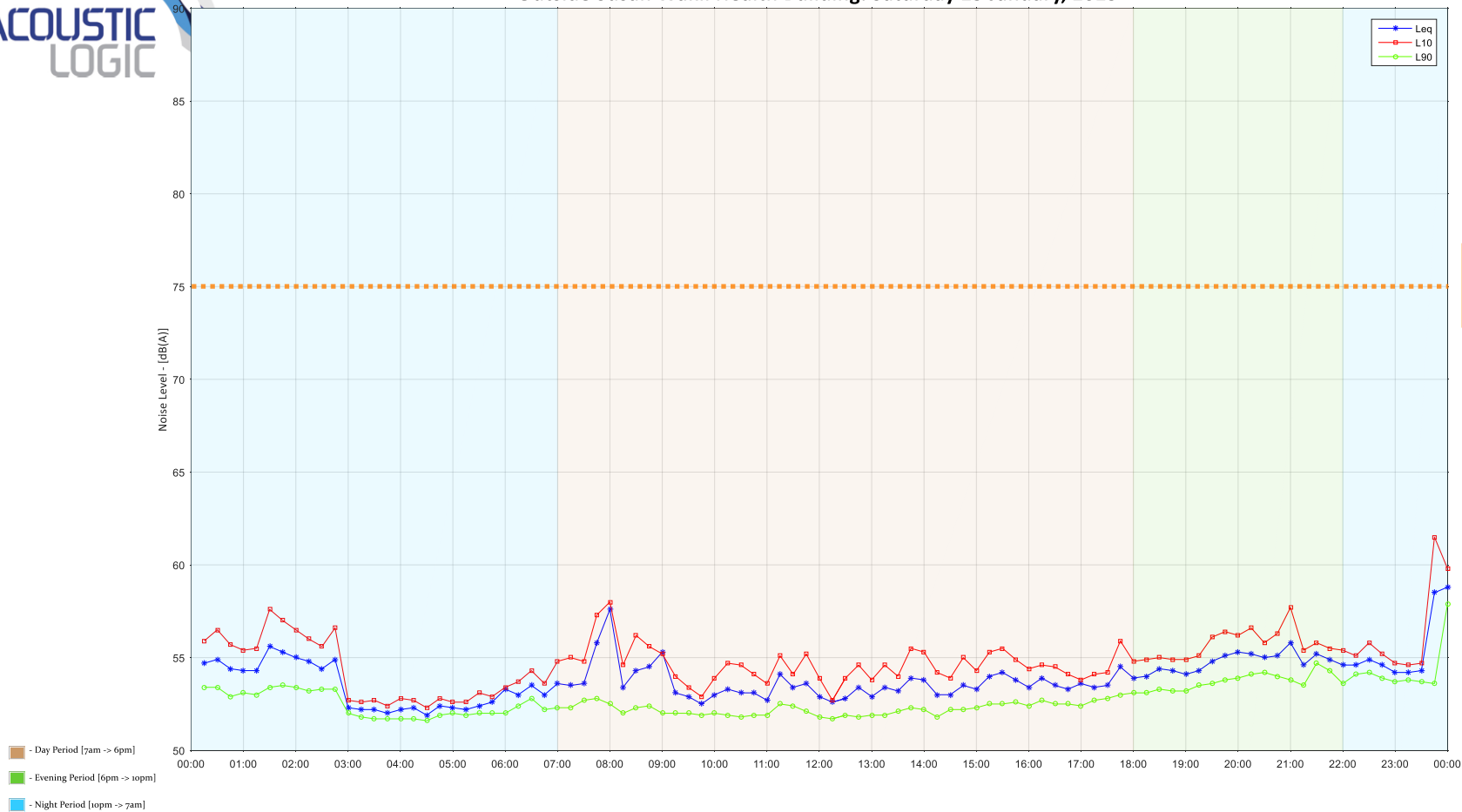
# Outside Susan Wakil Health Building: Friday 24 January, 2025



**Education NML  
(Including correction)  
 $\leq 75\text{dB(A)}_{L_{eq}}$**

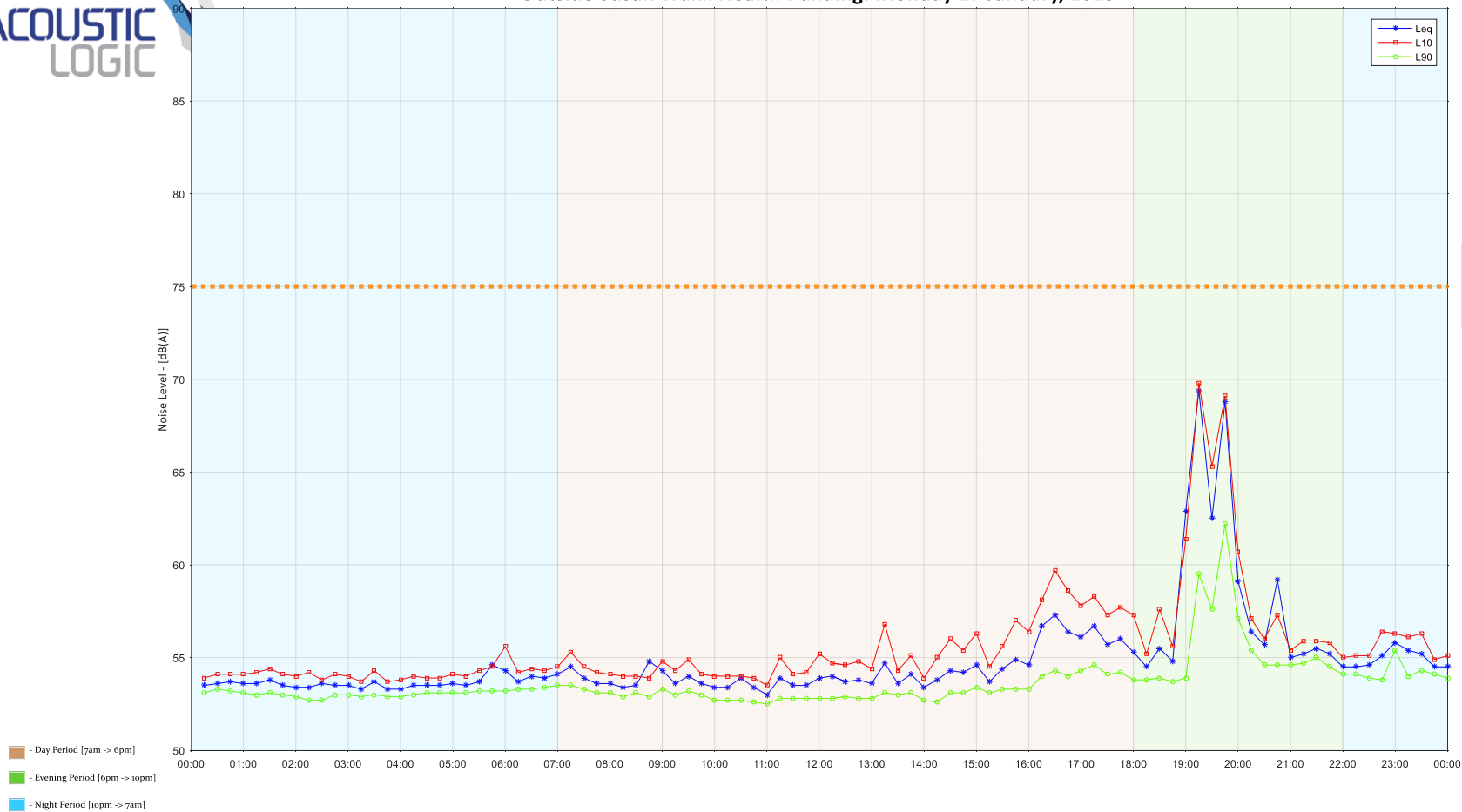


# Outside Susan Wakil Health Building: Saturday 25 January, 2025



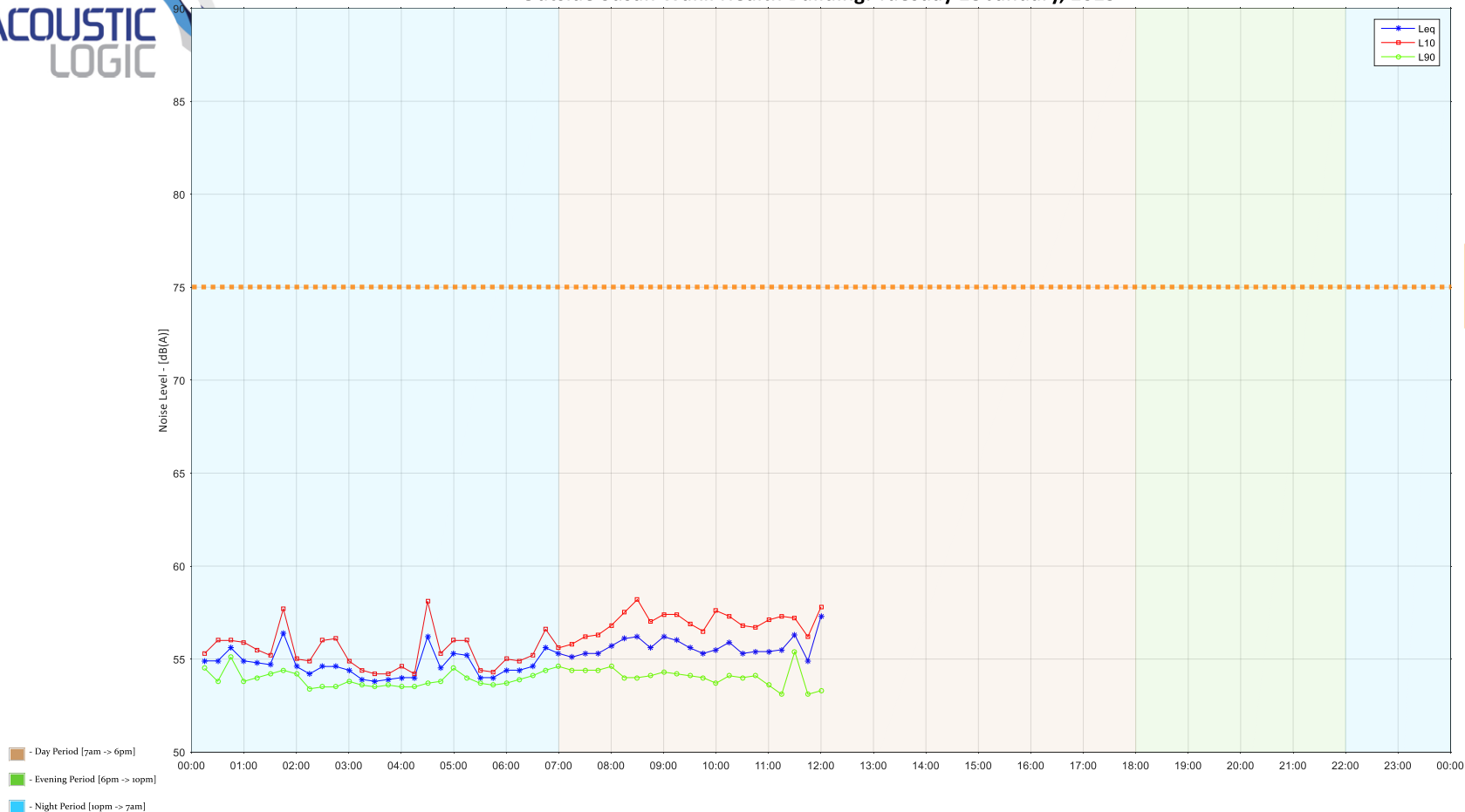
**Education NML  
(Including correction)  
 $\leq 75\text{dB(A)}_{L_{eq}}$**

# Outside Susan Wakil Health Building: Monday 27 January, 2025



**Education NML  
(Including correction)  
 $\leq 75\text{dB(A)}_{\text{Leq}}$**

# Outside Susan Wakil Health Building: Tuesday 28 January, 2025



**Education NML  
(Including correction)  
 $\leq 75\text{dB(A)}_{\text{Leq}}$**

## **APPENDIX B – VIBRATION MONITORING RESULTS**

Note that only dates where exceedances of events were experienced have been provided as per discussion with relevant stakeholders.

### **CENTENARY INSTITUTE – LEVEL 3 FISH TANKS**

No exceedances of criteria were observed throughout the monitoring period.

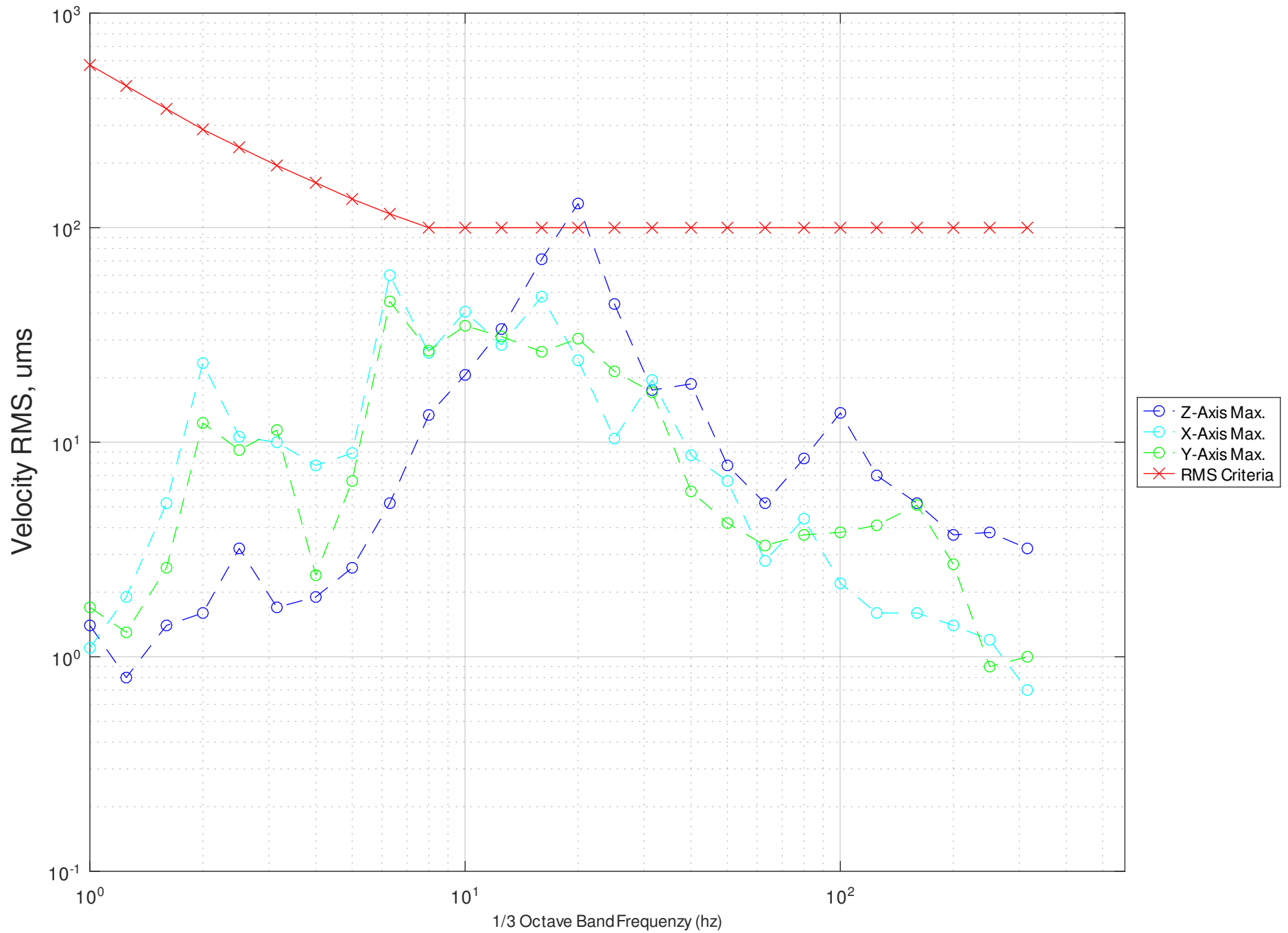
## **CENTENARY INSTITUTE – LEVEL 4 SURGERY ROOM (SOUTHERN FAÇADE)**

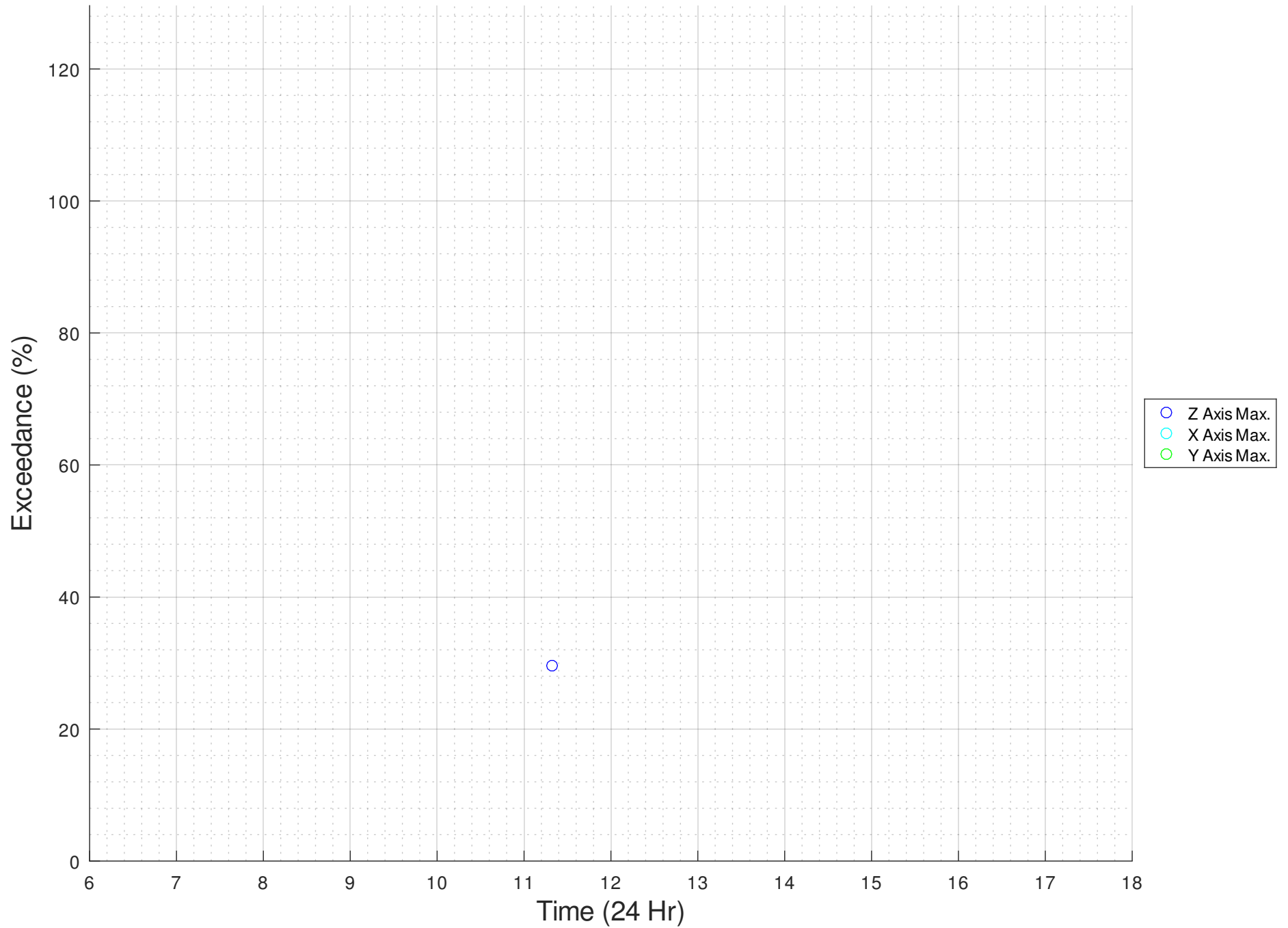
No exceedances of criteria were observed throughout the monitoring period.

## **CENTENARY INSTITUTE – LEVEL 4 BATHROOM (NORTHERN FAÇADE)**

# CI L4 Northern Bathroom - RMS Vibration Levels, Z,X&Y

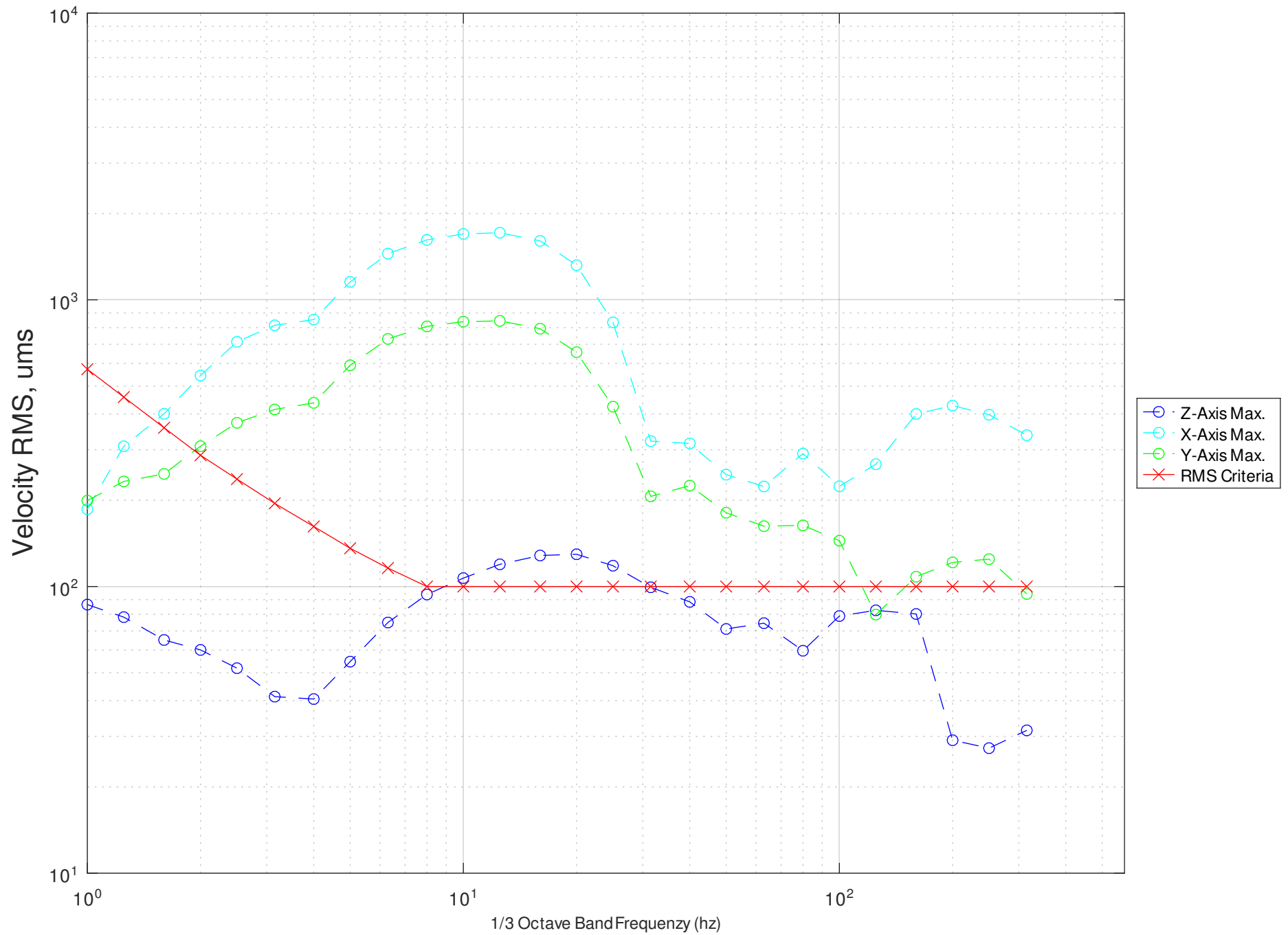
Date - 20250121

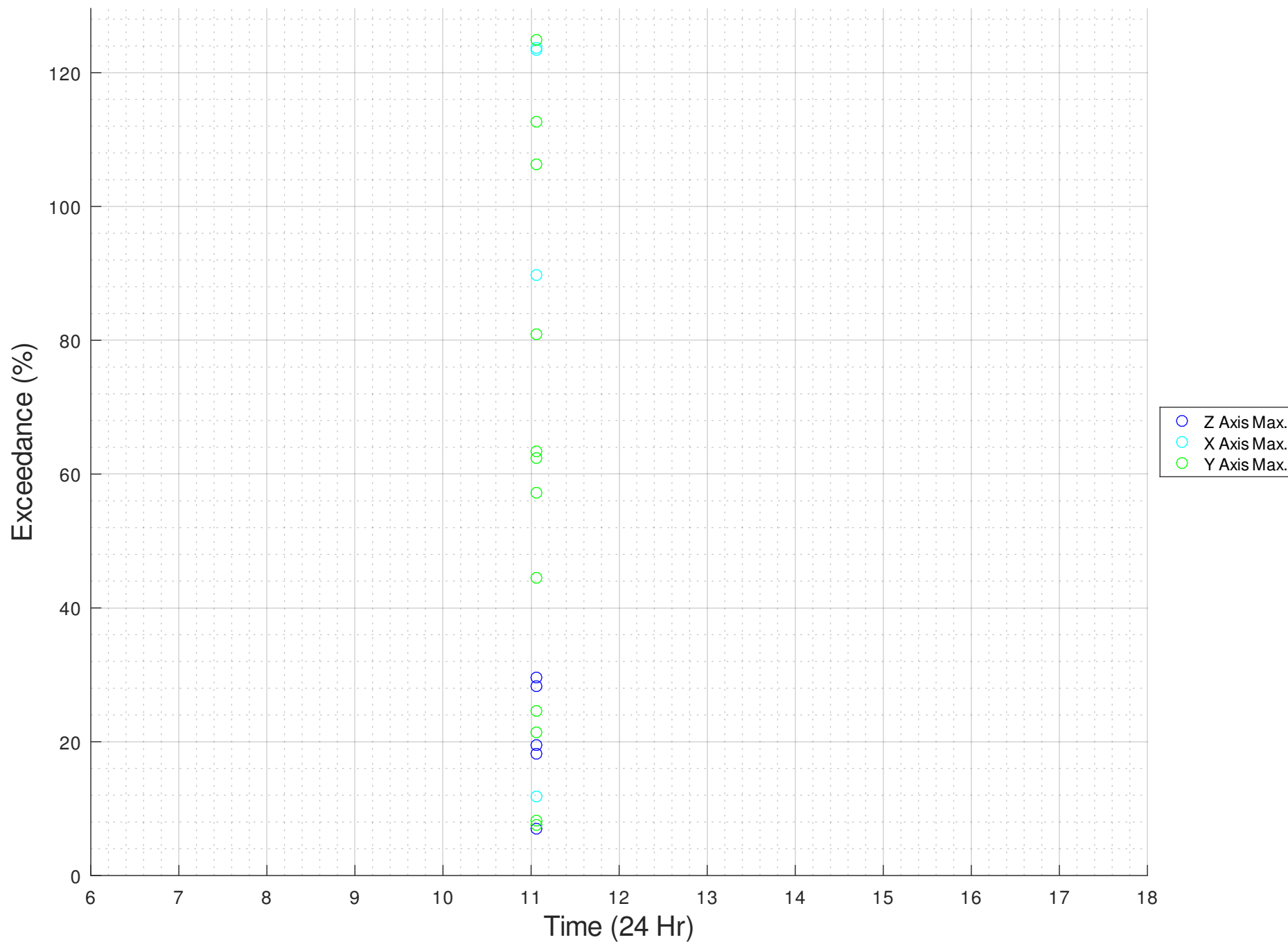




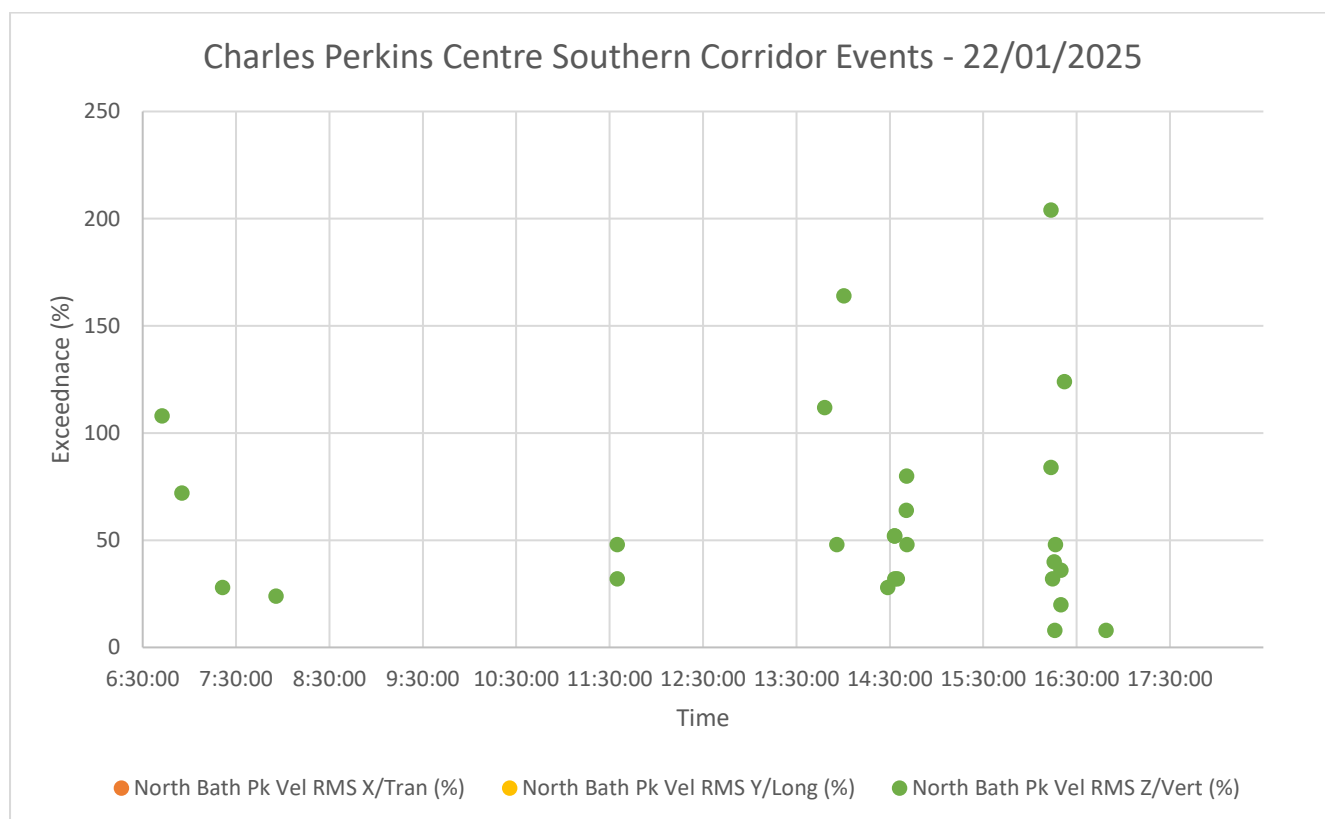
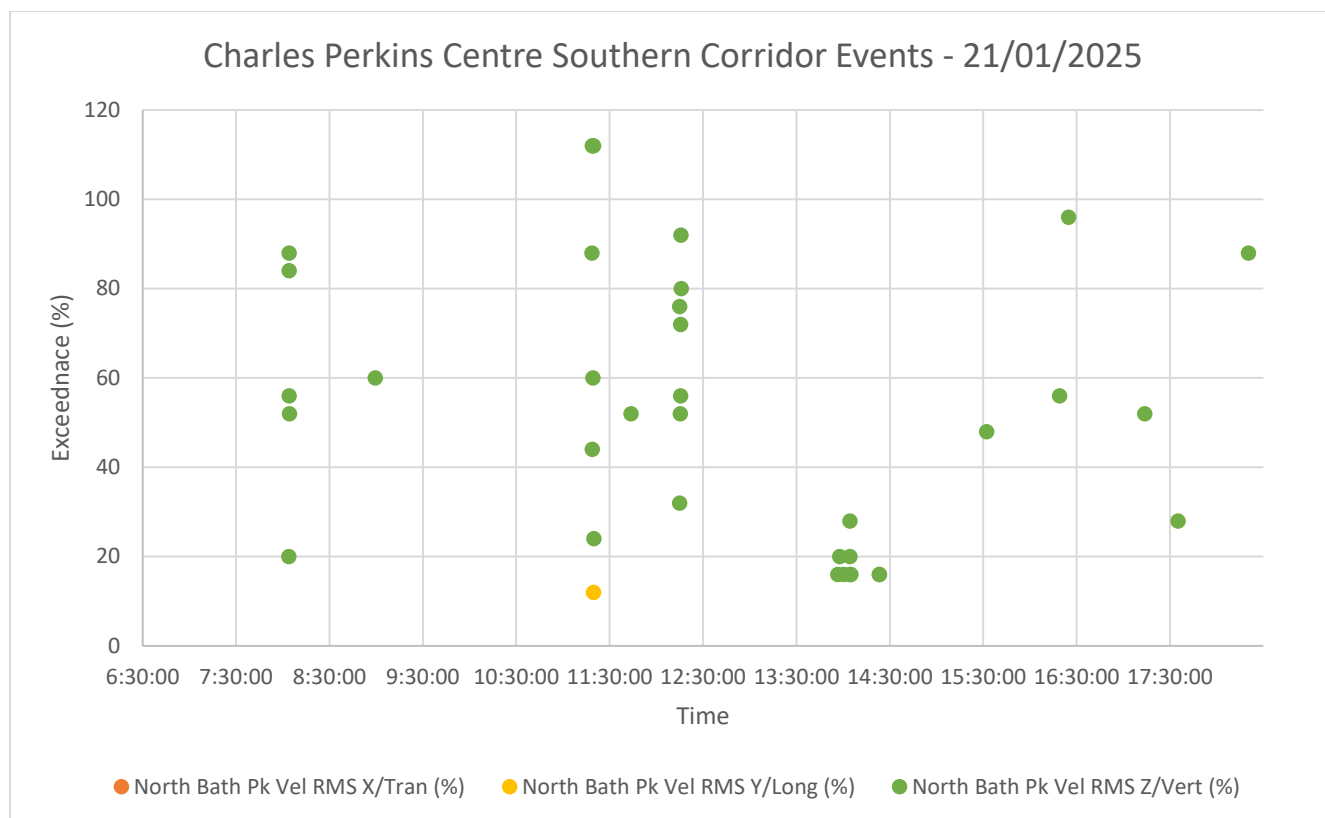


## **CENTENARY INSTITUTE – LEVEL 4 NORTHERN EXPERIMENTATION ROOM**

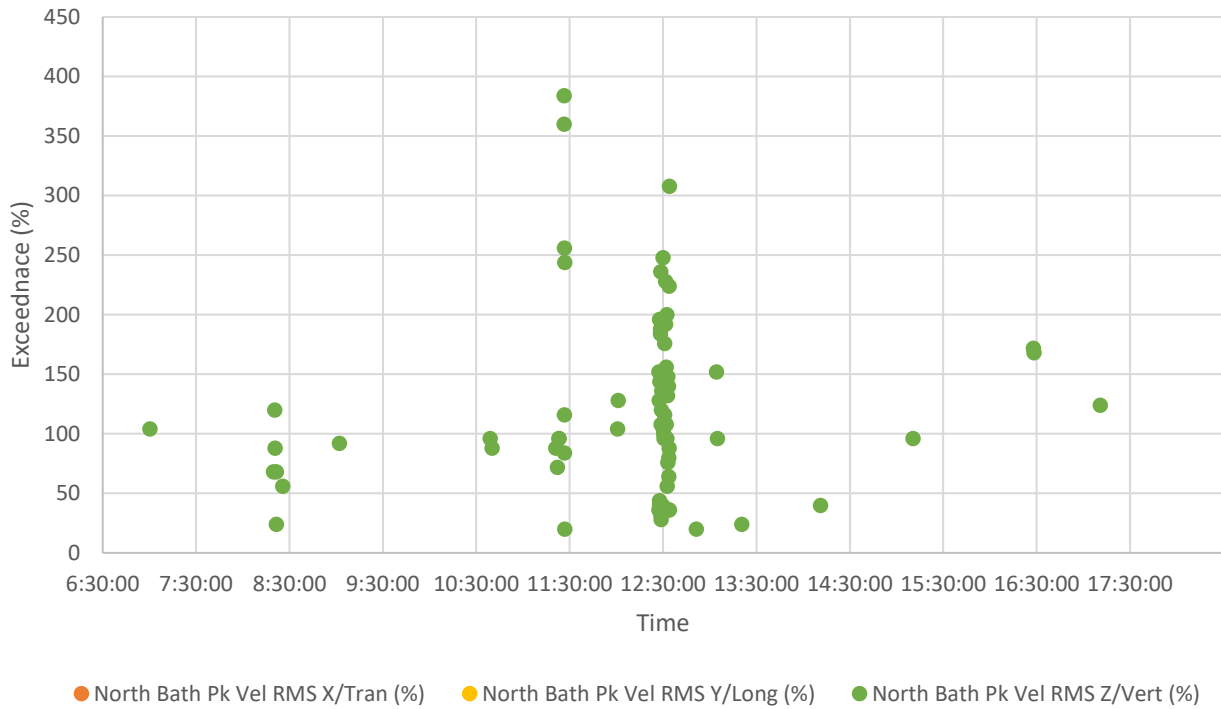




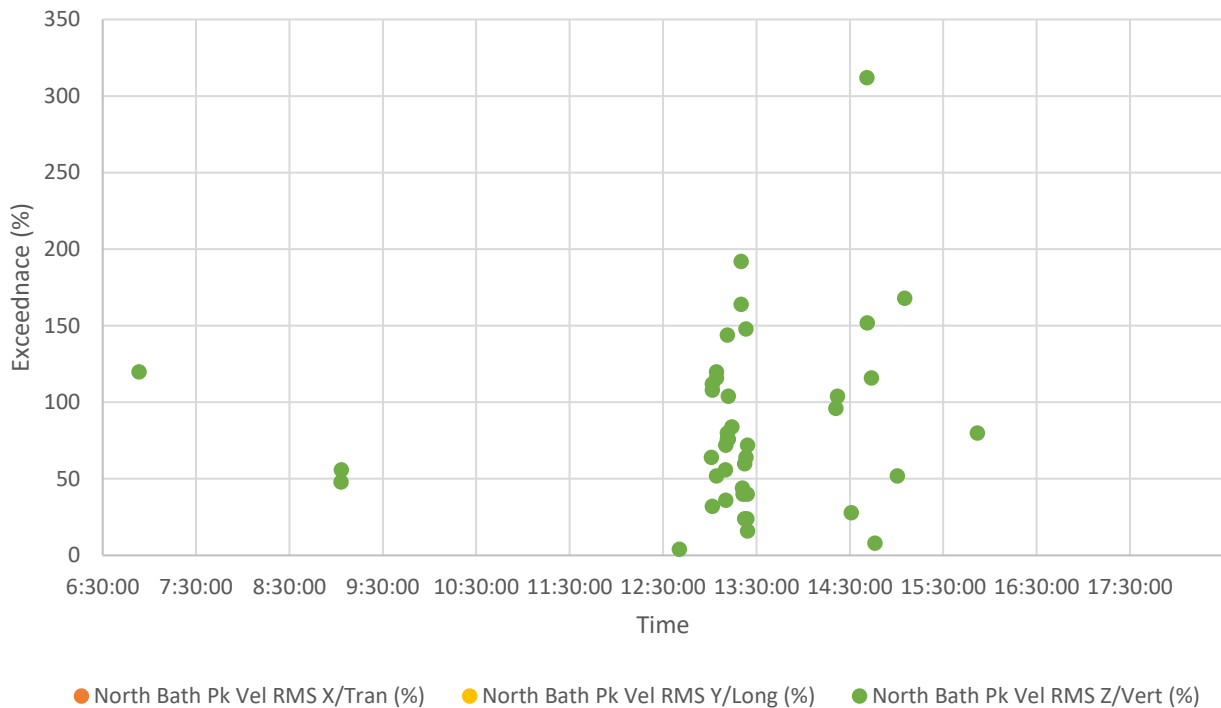
## CHARLES PERKINS CENTRE – LEVEL B1 SOUTHERN CORRIDOR



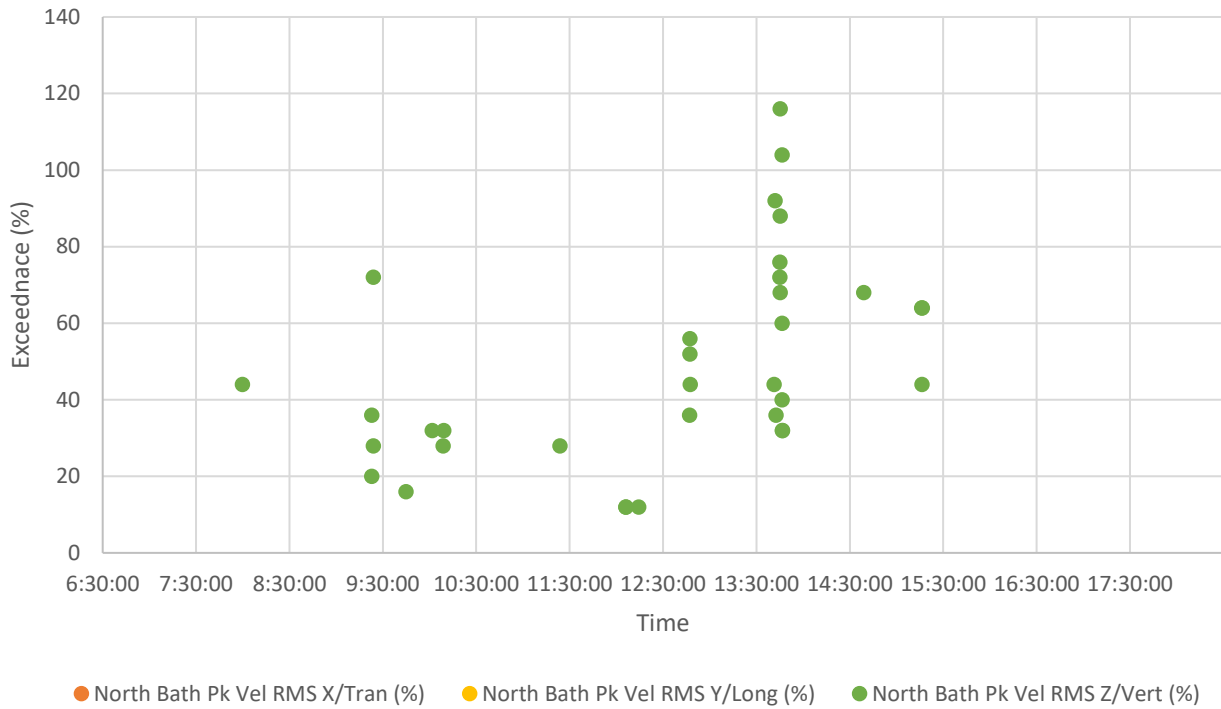
### Charles Perkins Centre Southern Corridor Events - 23/01/2025



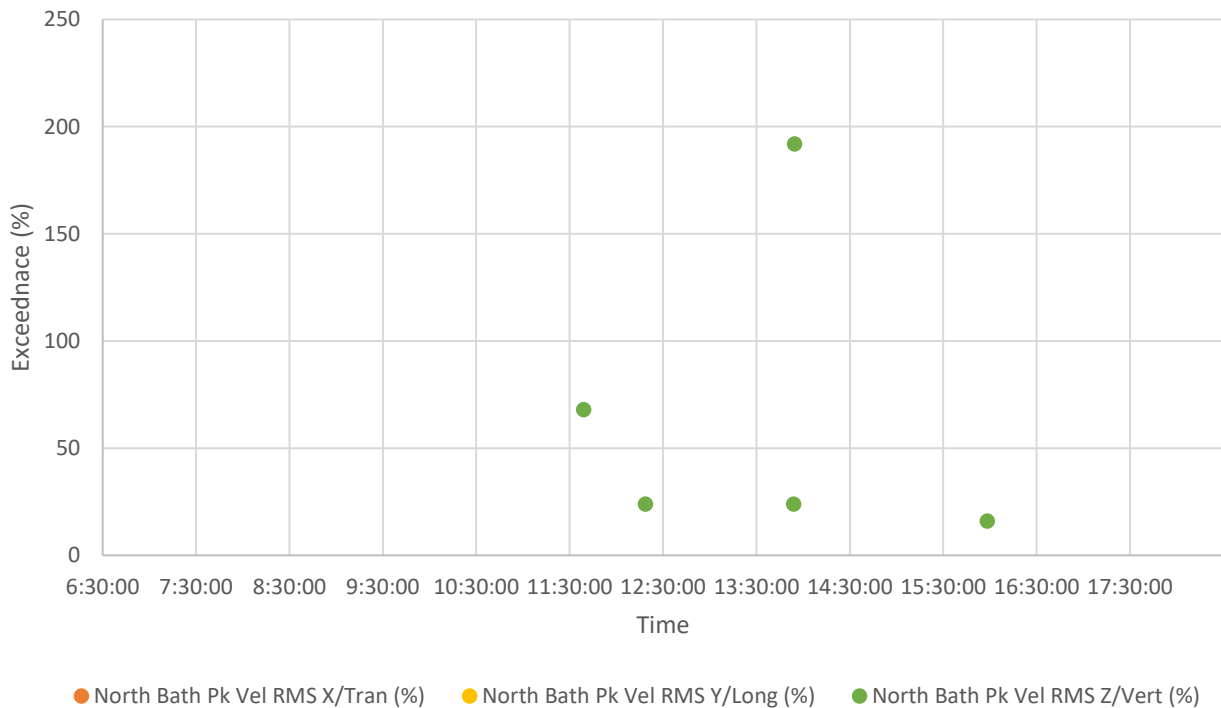
### Charles Perkins Centre Southern Corridor Events - 24/01/2025



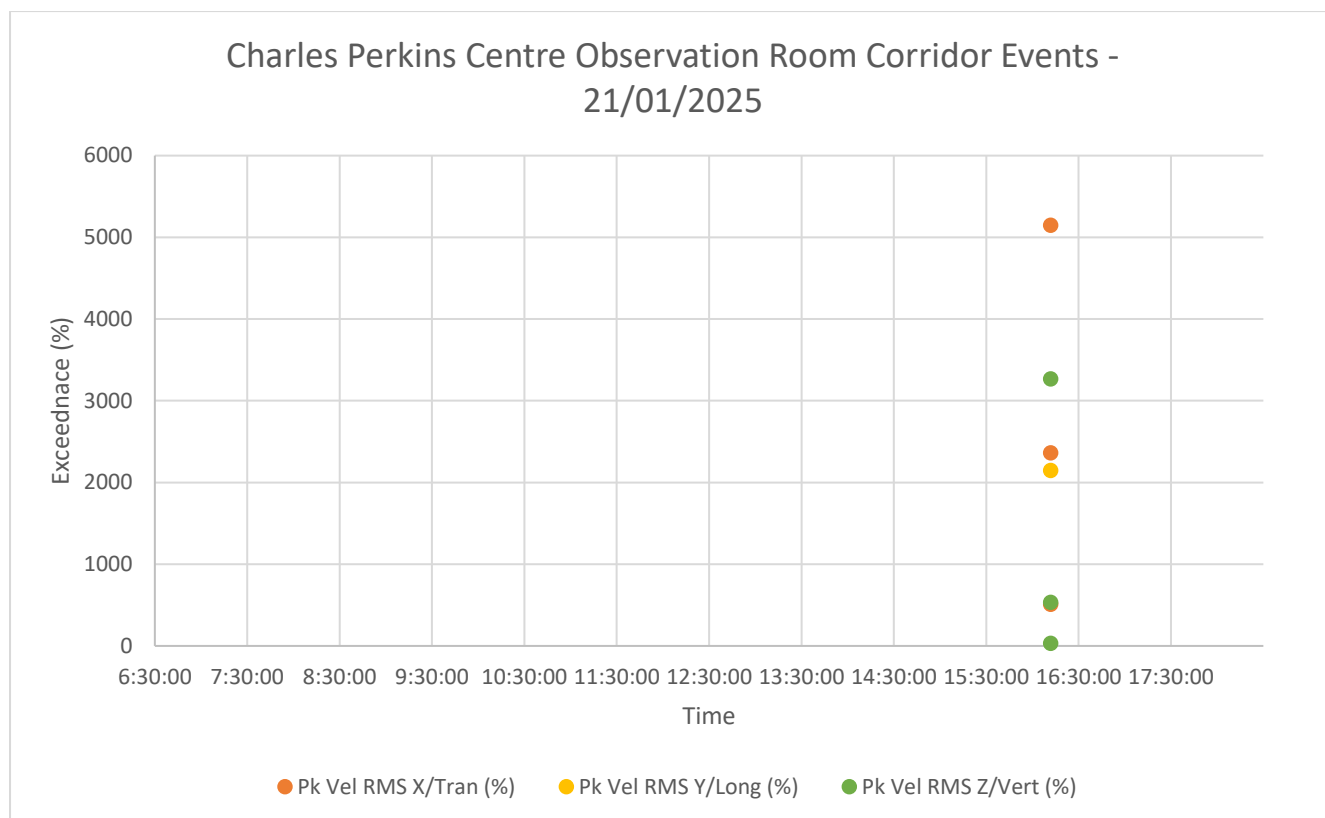
### Charles Perkins Centre Southern Corridor Events - 29/01/2025



### Charles Perkins Centre Southern Corridor Events - 31/01/2025

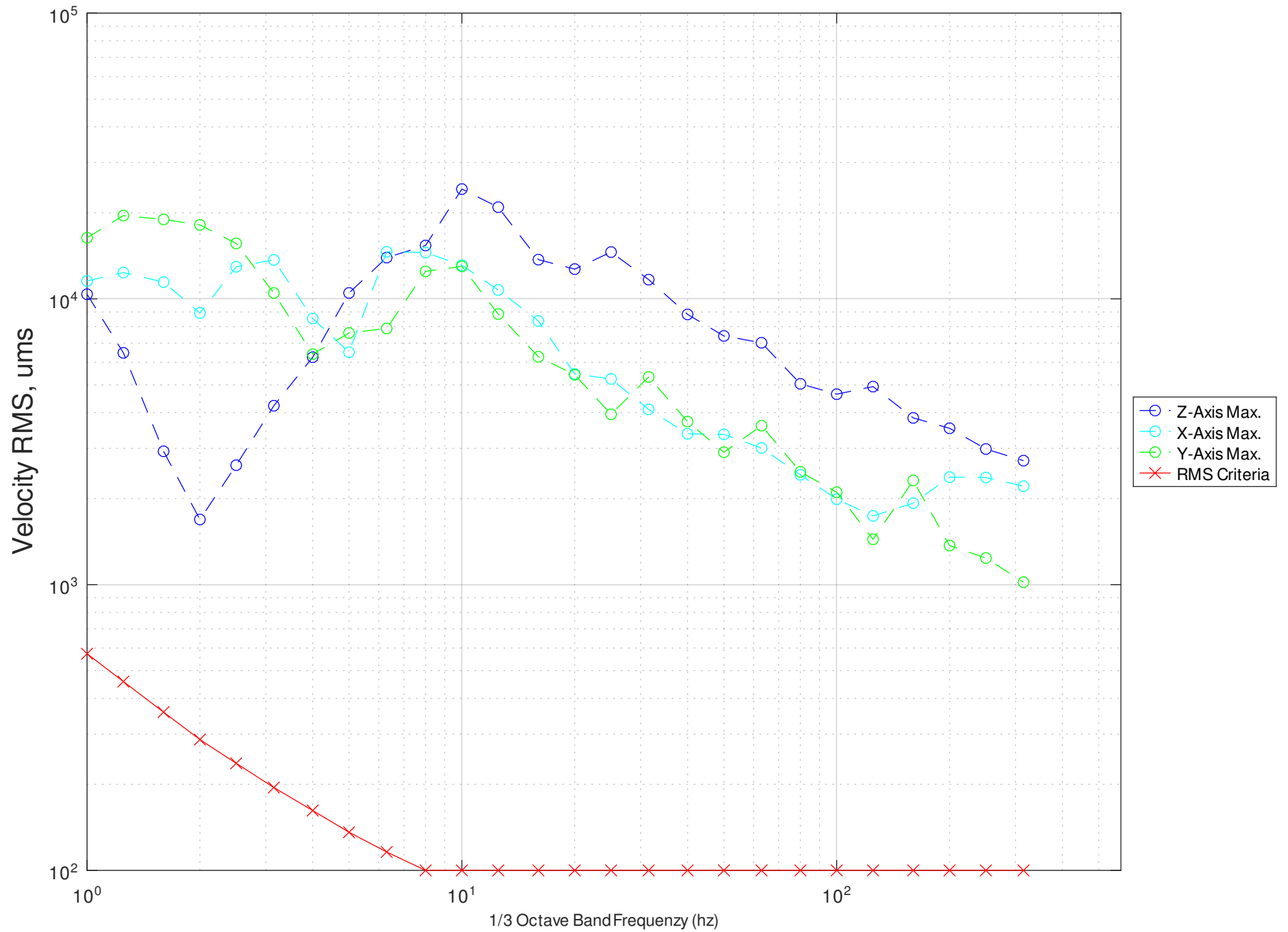


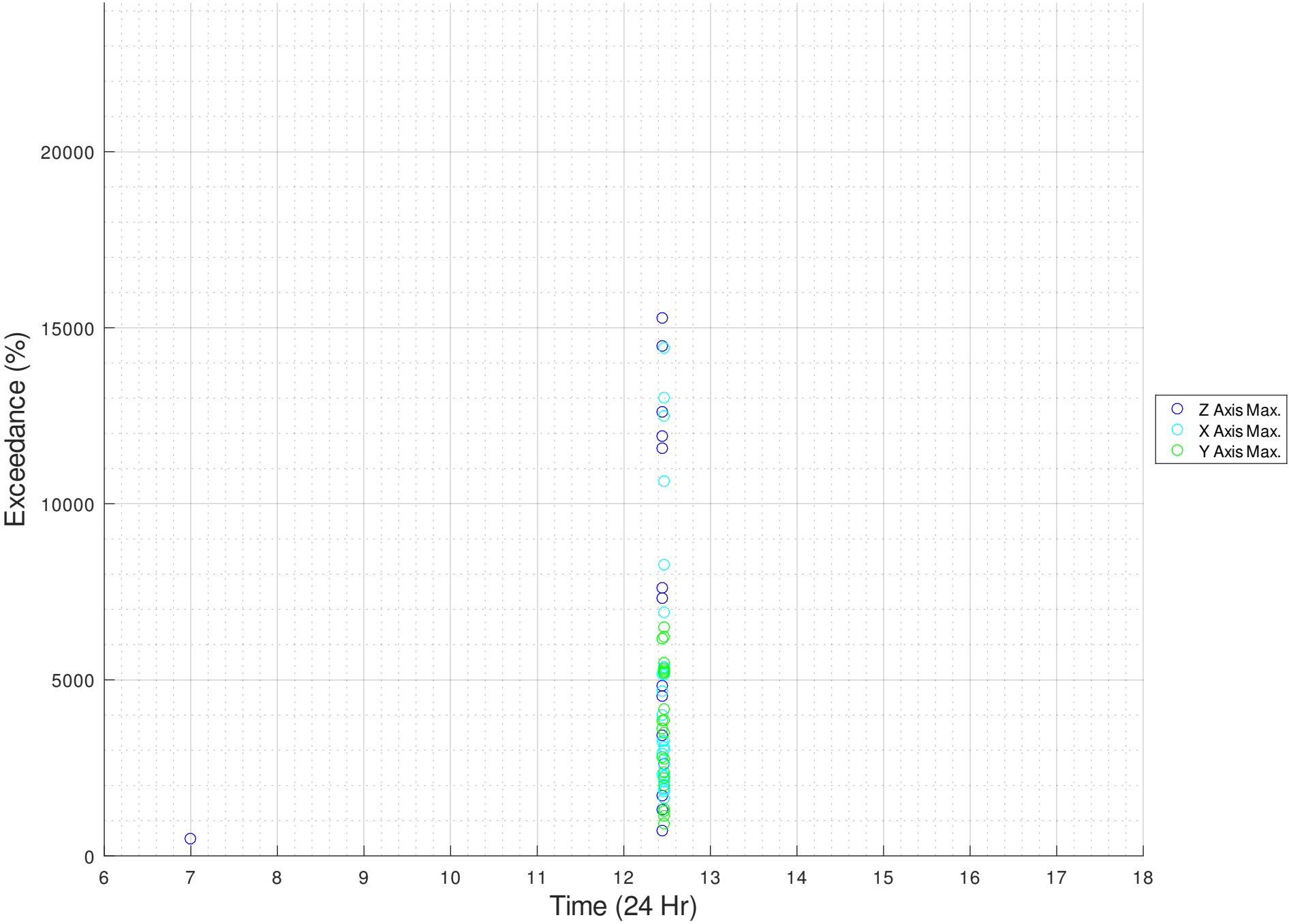
## CHARLES PERKINS CENTRE – LEVEL B1 SOUTHERN WING OBSERVATION ROOM CORRIDOR



## RPA HOSPITAL MAIN BUILDING – LEVEL 03 NICU







## **OUTSIDE SUSAN WAKIL HEALTH BUILDING**

No exceedances of criteria were observed throughout the monitoring period.