

20200830.1/2608A/R0/TX

26/08/2020

Bermagui Constructions Pty Ltd
Unit 3
No 1 Sydenham Rd
BROOKVALE NSW 2100

Attn: Ben Sheridan

1 Sydenham Rd Brookvale - DA Noise Assessment

This letter has been prepared as a response to a letter from the Northern Beaches Council, dated 13/08/2020 with regards to Development Application No: DA2020/0705.

Environmental Health:

An acoustic assessment by a suitably qualified and experienced professional such as an Acoustic Engineer is required in order to undertake a full assessment of the potential noise impacts from surrounding noise sources on occupants within the proposed residential premises. The acoustic assessment is to include any recommendations to reduce noise from nearby sources on occupants.

Acoustic Logic conducted unattended external noise monitoring on site during the period from 18th August 2020 to Monday 24th August. Noise monitoring was conducted to assess the potential noise impacts on the proposed residential premises.

To assess noise levels noise monitors were located outside the windows to the residence. One was located on the Sydenham Road façade outside the bedrooms, and one in the rear carpark outside the living room window. In this way noise on the main exposed façade was measured over an extended period from all noise sources (traffic and commercial emissions). External noise monitoring data is shown in Appendix A.

The monitors used retain current calibration. They were field calibrated prior to and after the measurements and there was no significant drift in calibration.

To assess the potential for noise impact we have adopted the Infrastructure SEPP requirement to determine whether the noise at the site is acceptable without further treatment. These noise levels are:

- Within Bedrooms – 35 dB(A) $L_{eq(9hr)}$
- Other habitable rooms – 40 dB(A) $L_{eq(15hr)}$

The results are summarised below.

Bedrooms:

The external noise level was 57dB(A) $L_{eq(9hr)}$. The night-time internal noise level within a bedroom was measured at 38dB(A) $L_{eq(9hr)}$. The bedrooms were not furnished during the test. The additional noise reduction from typical furnishings in a bedroom will result in a further 3 dB(A) reduction in noise. The internal level is compliant with the SEPP criterion.

Living Room:

The unattended noise monitoring outside this room indicated an external noise level of 57dB $L_{eq(15hr)}$. As a typical untreated façade will produce a noise reduction of at least 20dB(A), the noise level in the living room will be less than 40dBA $L_{eq(15hr)}$ which is clearly compliant with the SEPP criteria.

Study:

The predicted noise level in the study (based on the noise level measured outside the bedroom) is less than 37 dB(A) $L_{eq(15hr)}$ which is clearly compliant with the SEPP criteria.

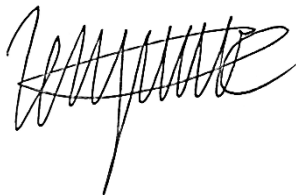
Results Summary:

Space	Noise Level dB(A) L_{eq}	Criteria dB(A) L_{eq}	Complies
Living	<37	40	Yes
Study	<37	40	Yes
Bedrooms	35	35	Yes

The assessment indicates that ambient noise levels within the proposed residence from local environmental sources are compliant with noise criteria determined using the NSW Infrastructure without further treatment. Therefore no additional treatment of the proposed dwelling is required.

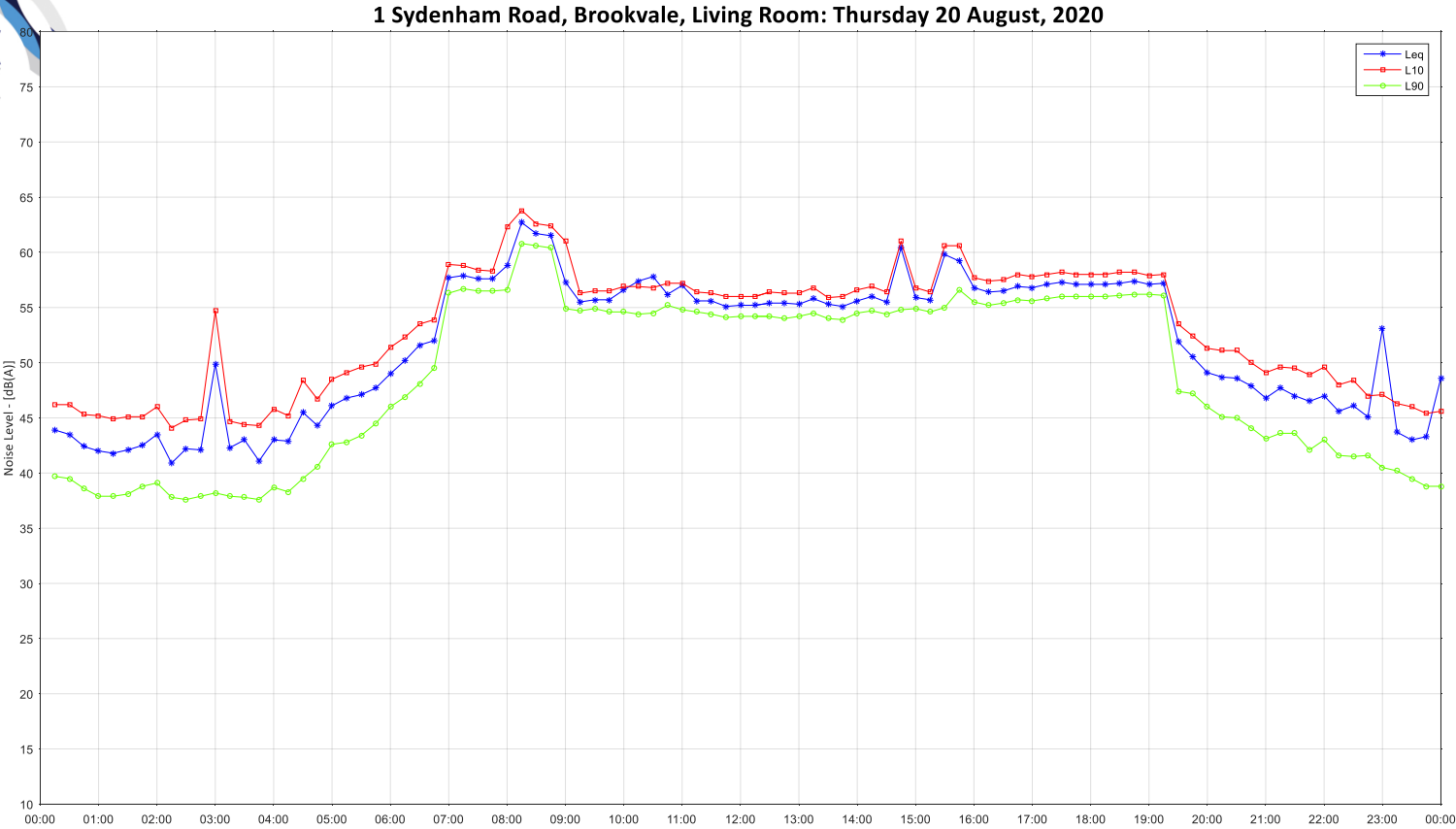
We trust this information is satisfactory. Please contact us should you have any further queries.

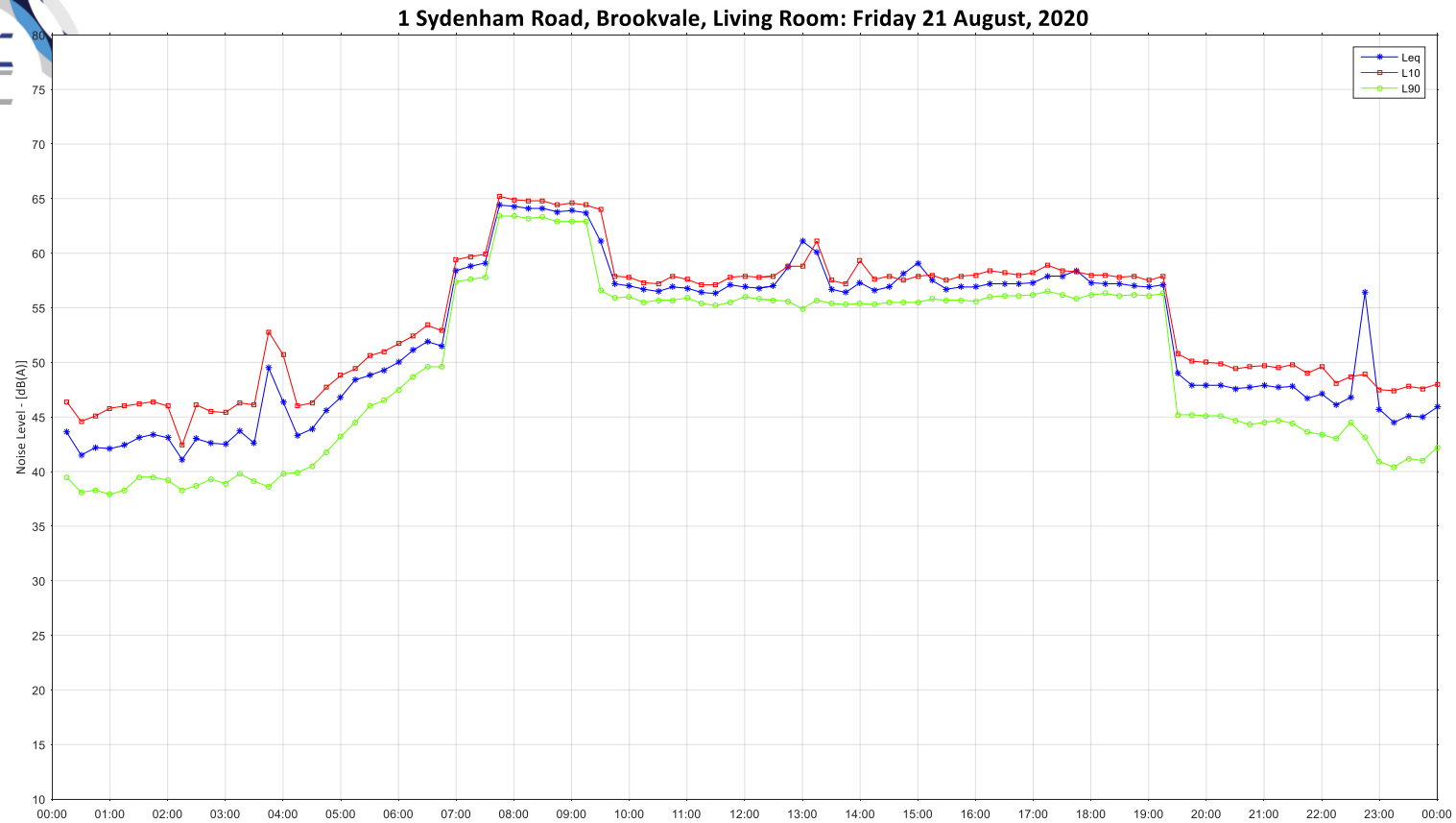
Yours faithfully,

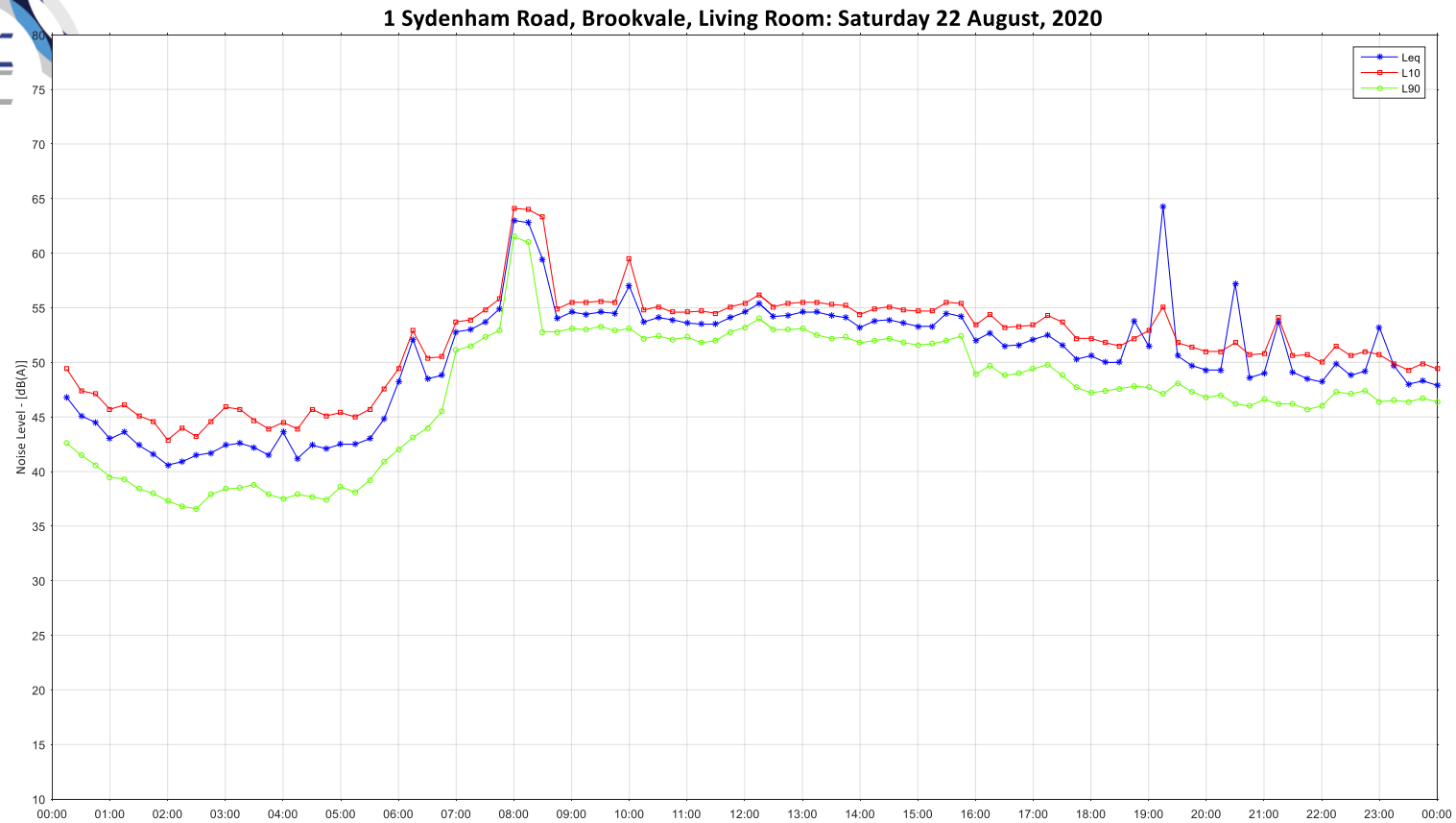


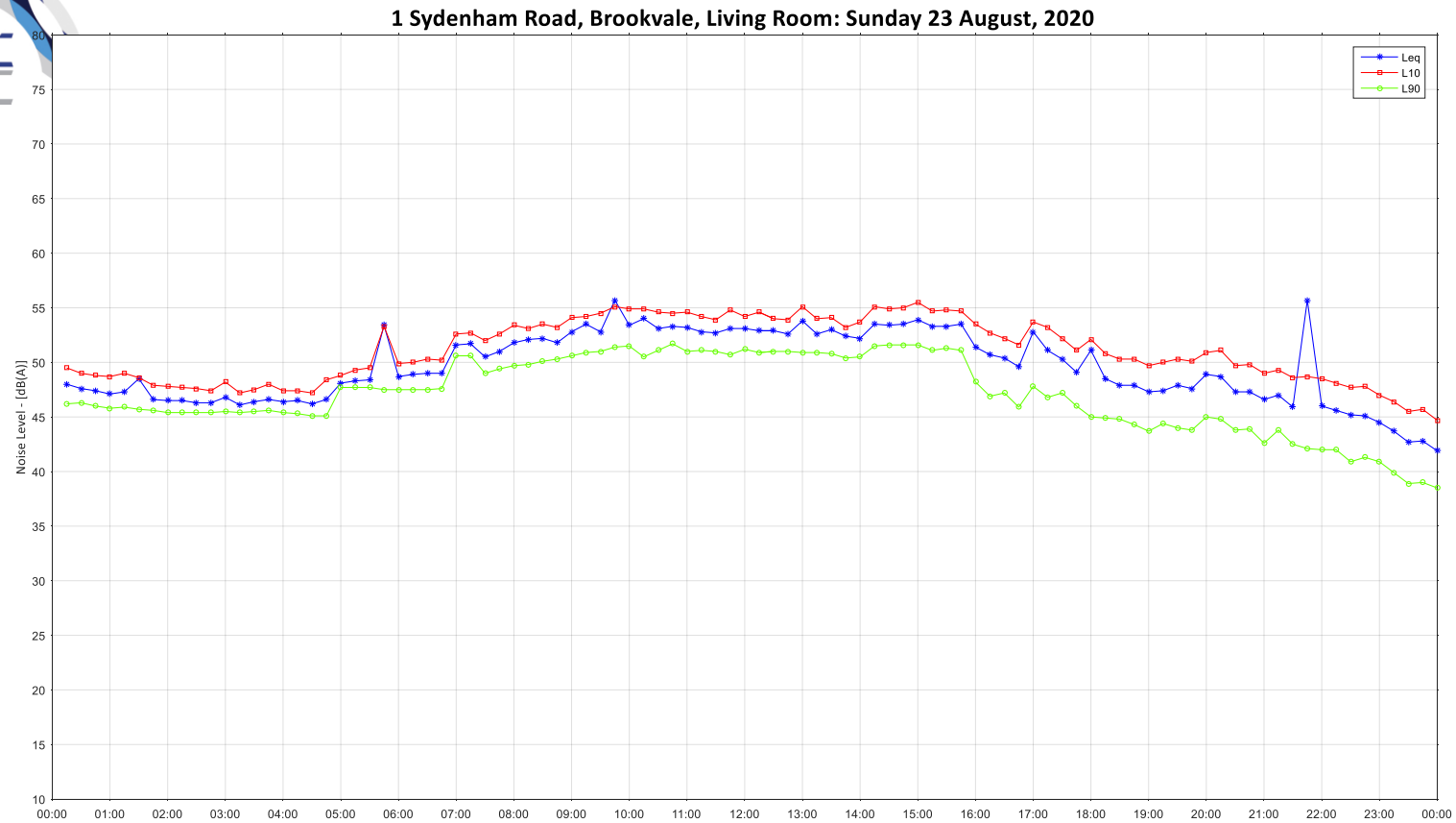
Acoustic Logic Pty Ltd
Tony Xiao

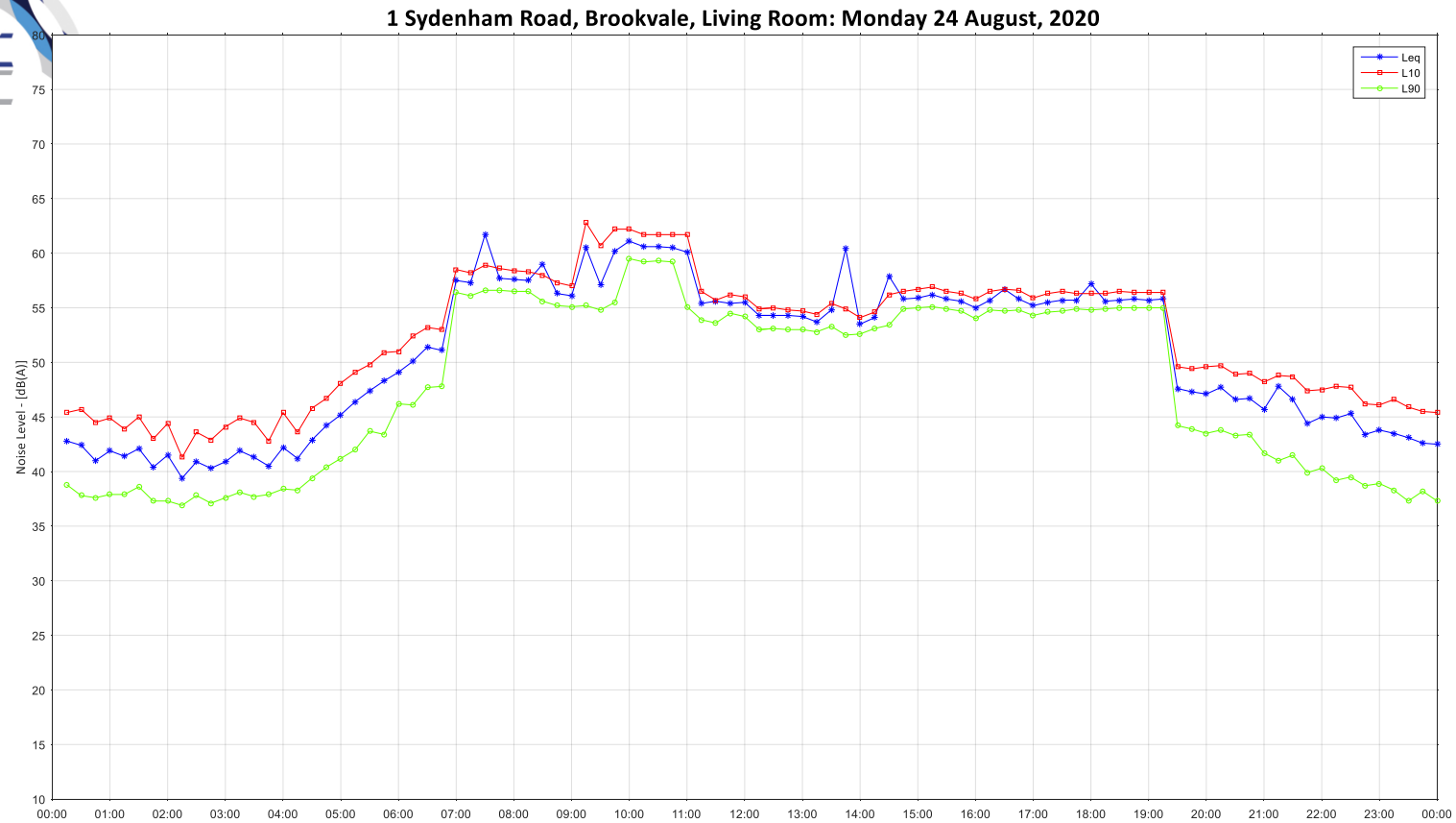
APPENDIX A: EXTERNAL UNATTENDED NOISE MONITORING DATA



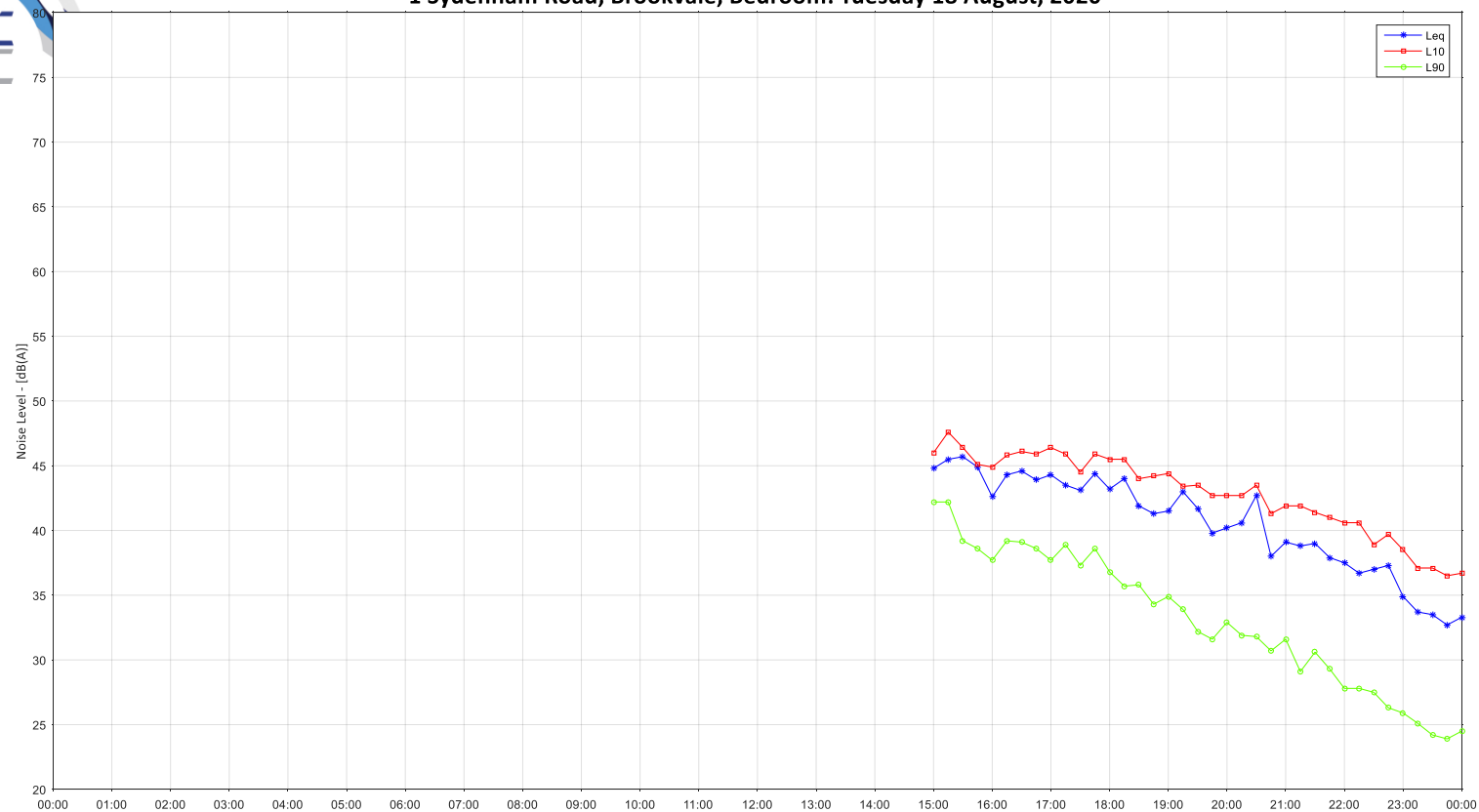




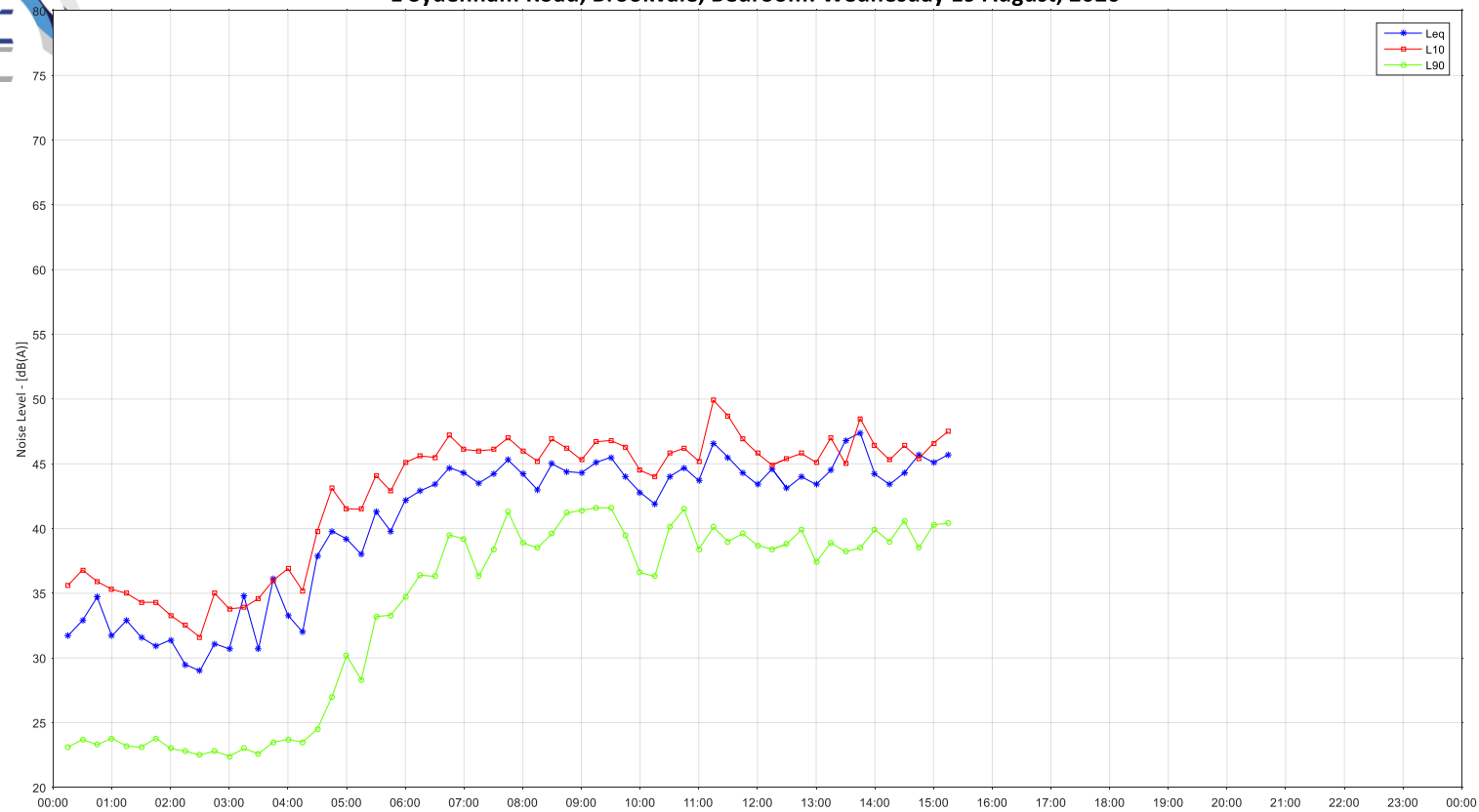




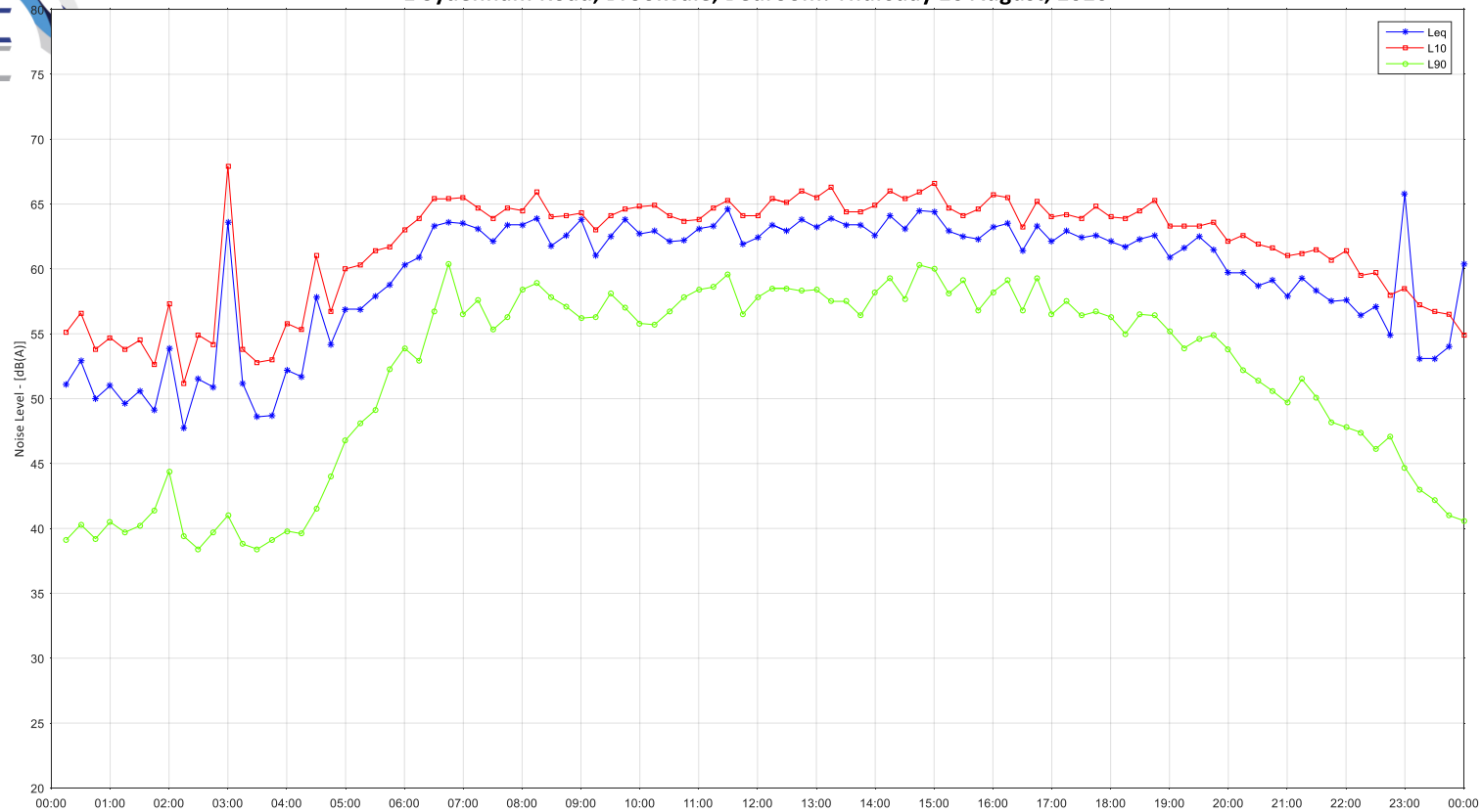
1 Sydenham Road, Brookvale, Bedroom: Tuesday 18 August, 2020



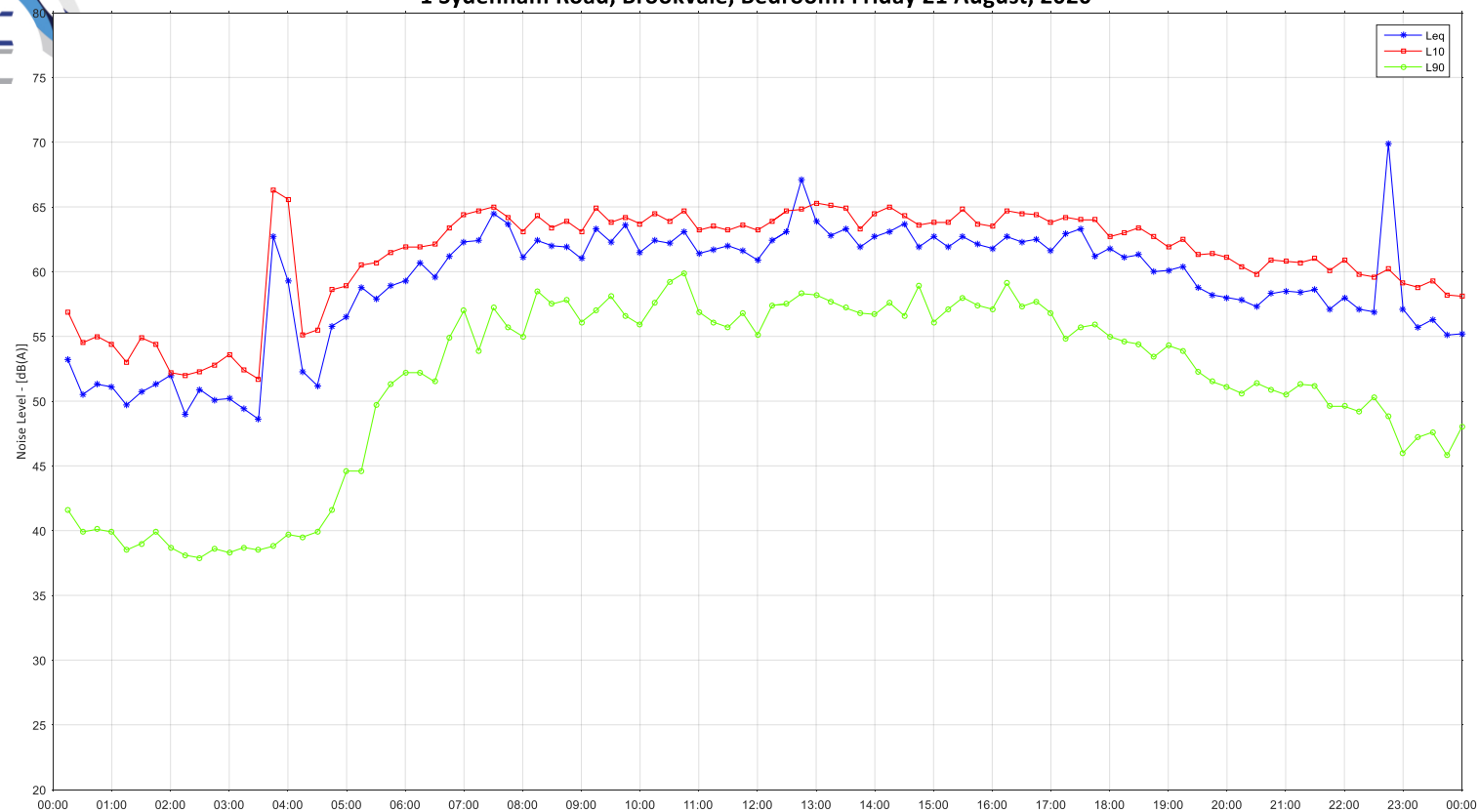
1 Sydenham Road, Brookvale, Bedroom: Wednesday 19 August, 2020



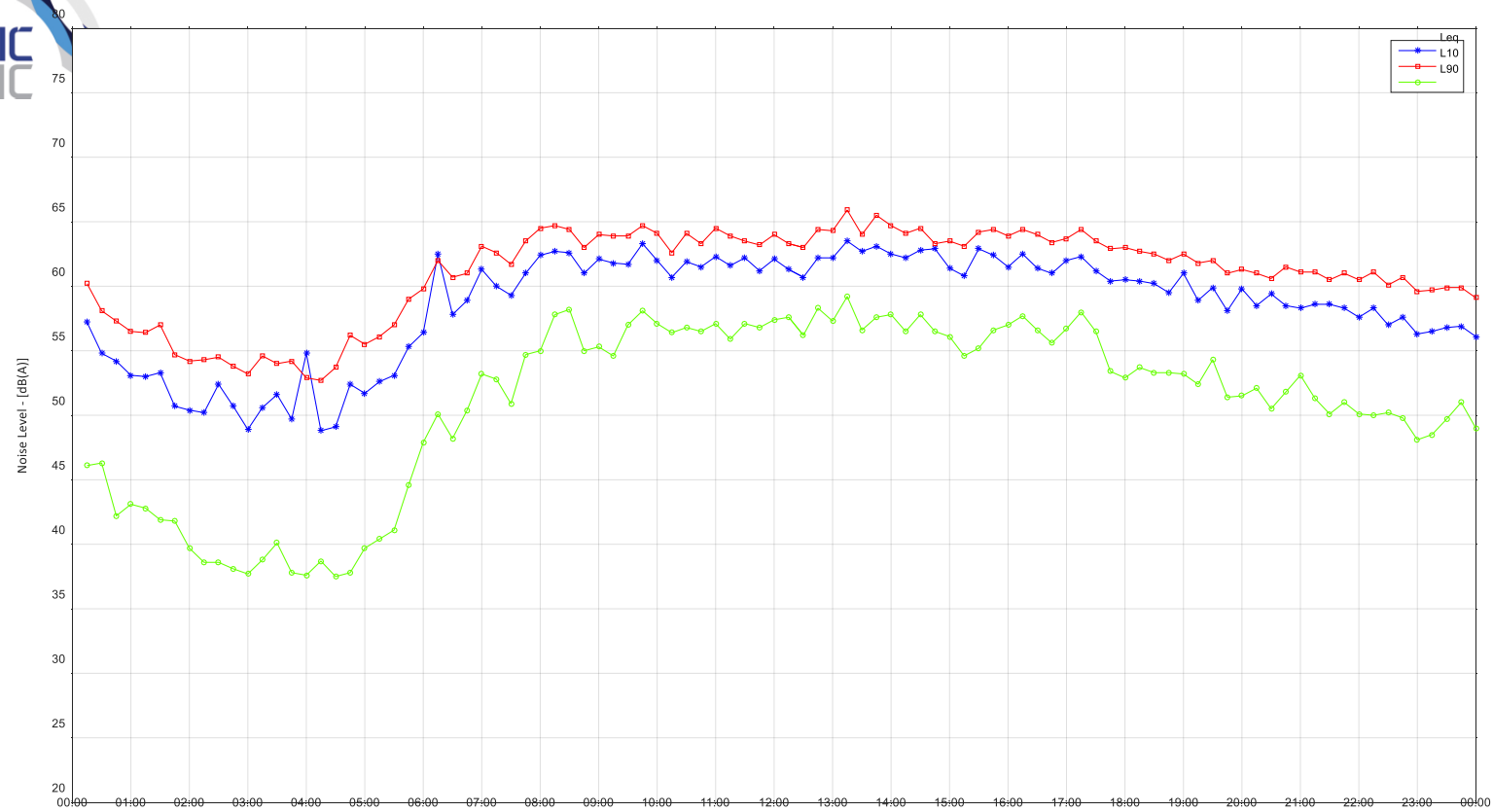
1 Sydenham Road, Brookvale, Bedroom: Thursday 20 August, 2020



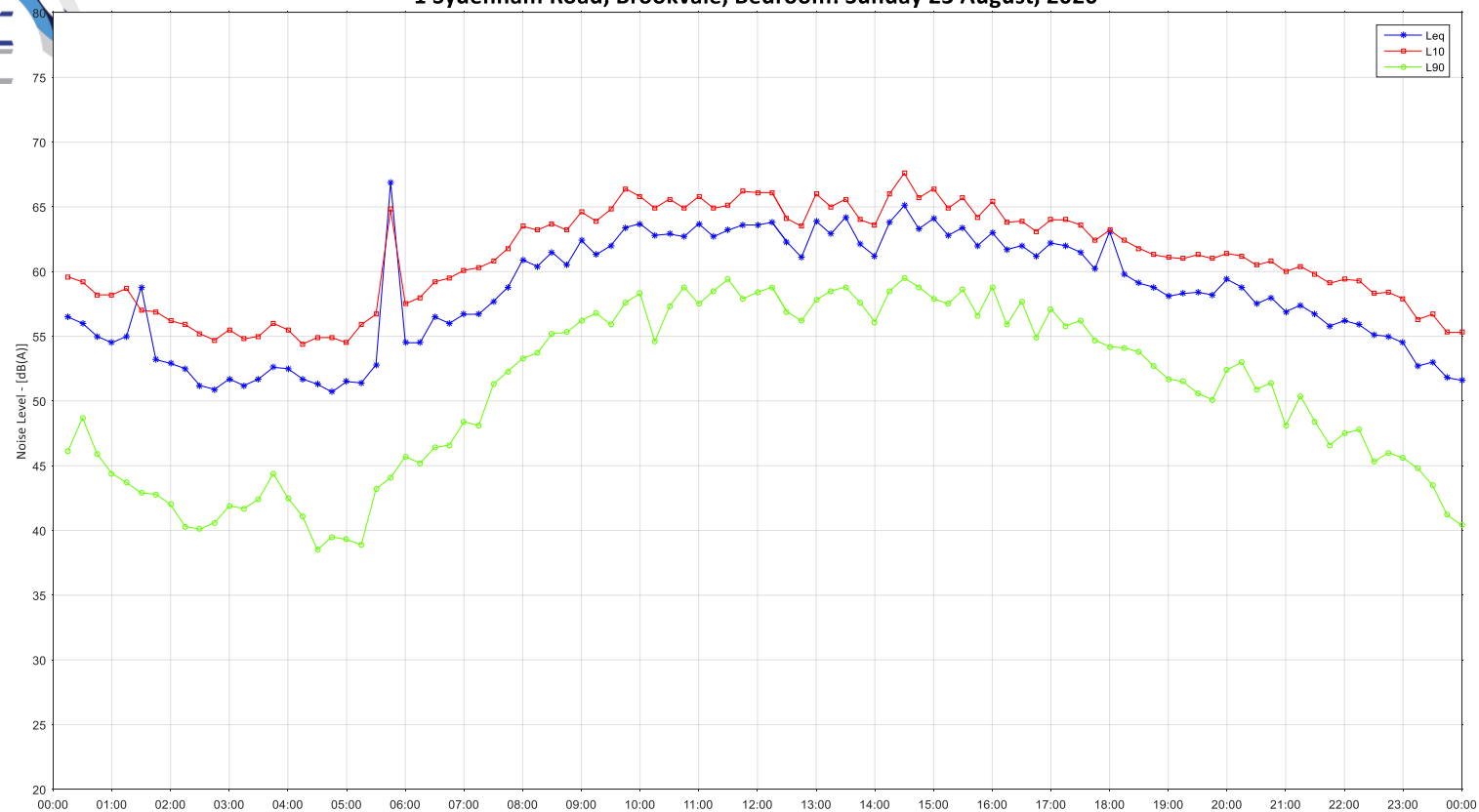
1 Sydenham Road, Brookvale, Bedroom: Friday 21 August, 2020



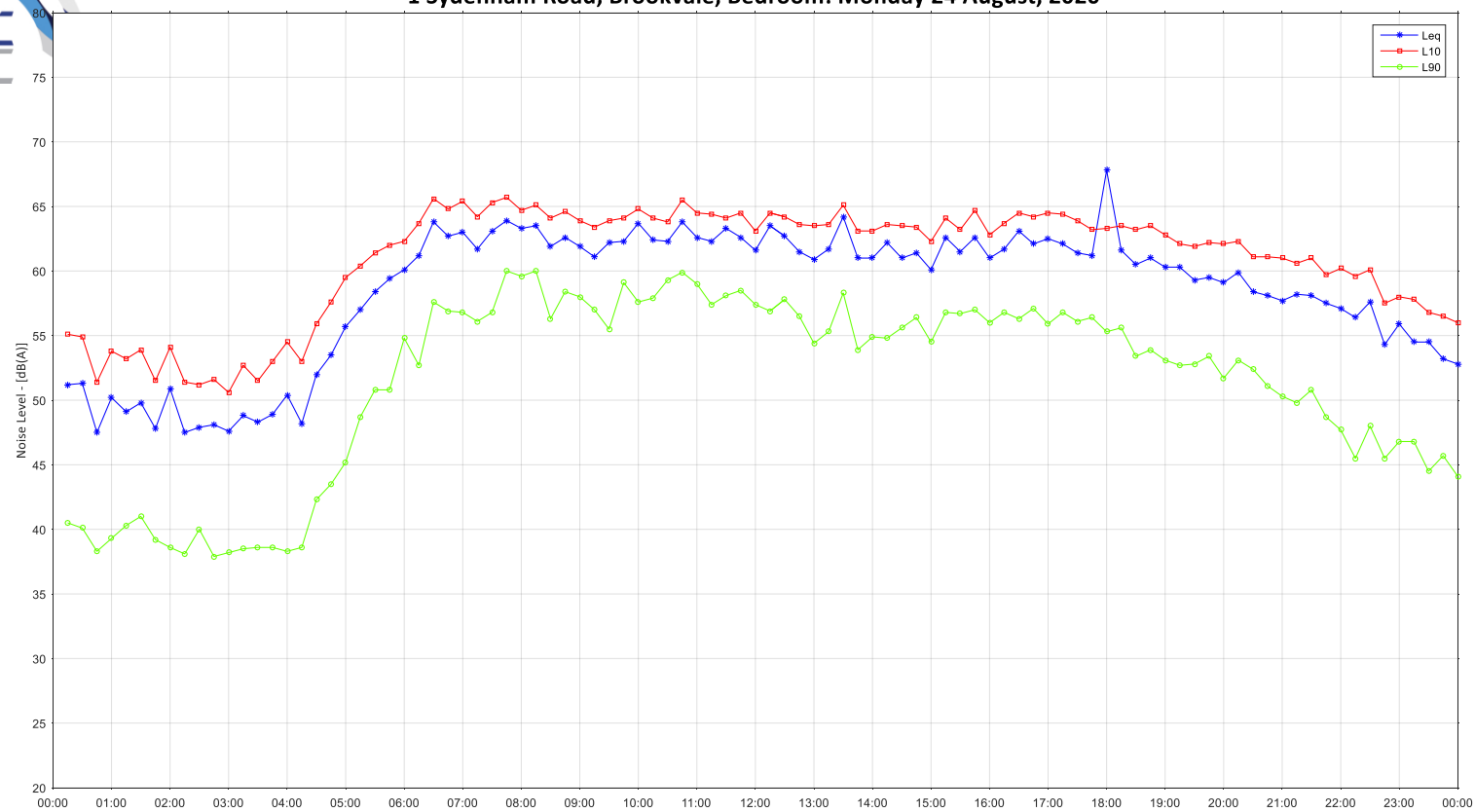
1 Sydenham Road, Brookvale, Bedroom: Saturday 22 August, 2020



1 Sydenham Road, Brookvale, Bedroom: Sunday 23 August, 2020



1 Sydenham Road, Brookvale, Bedroom: Monday 24 August, 2020



1 Sydenham Road, Brookvale, Bedroom: Tuesday 25 August, 2020

