

# Appendix 4.19 Background Noise Measurement

## Noise Measurement Location

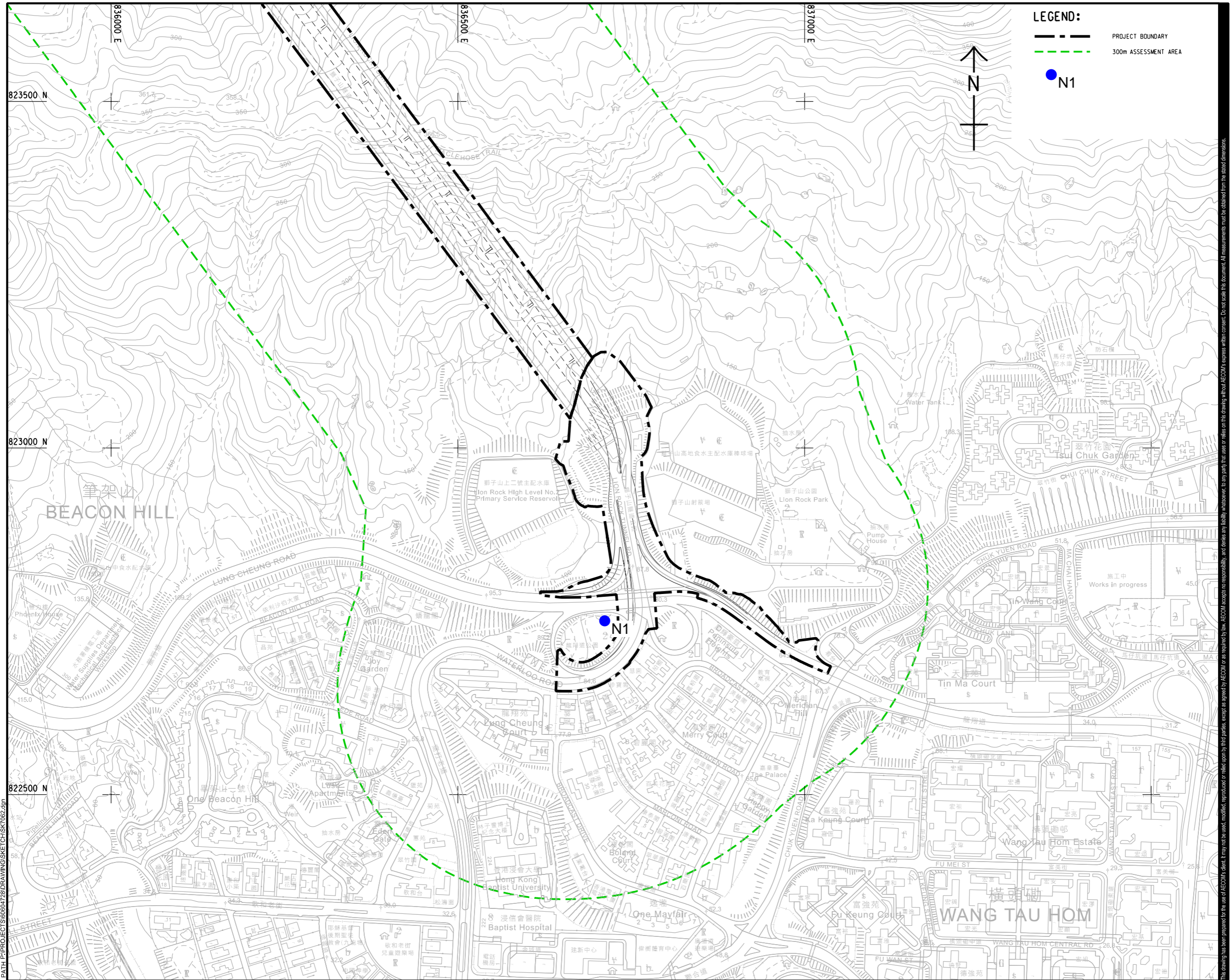
N1 Lung Cheung Road Park facing Lion Rock Tunnel Portal



Measure Pts.

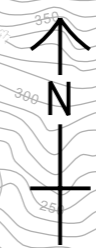
Background\_Noise\_Summary.xlsx

P:\60604728\1.06-ENV.EIA\Others\Noise\Background Noise Measurement\



**LEGEND:**

- PROJECT BOUNDARY
- 300m ASSESSMENT AREA
- N1



**AECOM**

PROJECT  
 項目

**IMPROVEMENT OF LION ROCK TUNNEL - INVESTIGATION**

CLIENT  
 業主

**路政署  
 HIGHWAYS DEPARTMENT**

CONSULTANT  
 顧問公司

AECOM Asia Company Ltd.  
 www.aecom.com

SUB-CONSULTANTS  
 分判工程顧問公司

**ISSUE/REVISION**

| IR | DATE | DESCRIPTION | CHK. |
|----|------|-------------|------|
|    |      |             |      |
|    |      |             |      |
|    |      |             |      |
|    |      |             |      |

**STATUS**  
 狀況

**SCALE**  
 比例

A3 1 : 5000

**DIMENSION UNIT**  
 尺寸單位

METRES

**KEY PLAN**  
 索引圖

**PROJECT NO.**  
 項目編號

60604728

**AGREEMENT NO.**  
 協議編號

CE 48/2018(HY)

**SHEET TITLE**  
 圖紙名稱

LOCATION OF NOISE MEASUREMENT POINT

**SHEET NUMBER**  
 圖紙編號

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## Appendix 4.19 Background Noise Measurement

### Measurement Result

| Measurement<br>Start Time [2] | Noise Levels at Noise Measurement Point, dB(A) [1] |      |      |       |       |
|-------------------------------|--|------|------|-------|-------|
|                               | LAeq   | LA10 | LA90 | LAMax | LAMin |
| 29-Nov-2020 00:00             | 75.4   | 77.5 | 71.5 | 89.4  | 64.0  |
| 29-Nov-2020 00:30             | 74.7   | 76.9 | 70.2 | 95.8  | 64.0  |
| 29-Nov-2020 01:00             | 73.8   | 76.4 | 69.2 | 85.9  | 62.5  |
| 29-Nov-2020 01:30             | 72.4   | 75.0 | 66.9 | 86.3  | 59.7  |
| 29-Nov-2020 02:00             | 72.5   | 75.4 | 66.9 | 83.6  | 61.7  |
| 29-Nov-2020 02:30             | 71.9   | 74.7 | 66.0 | 88.7  | 59.3  |
| 29-Nov-2020 03:00             | 71.2   | 74.3 | 63.9 | 82.7  | 53.9  |
| 29-Nov-2020 03:30             | 70.9   | 74.0 | 64.5 | 81.7  | 55.2  |
| 29-Nov-2020 04:00             | 70.6   | 73.6 | 63.6 | 84.0  | 57.1  |
| 29-Nov-2020 04:30             | 70.7   | 73.9 | 63.3 | 80.4  | 56.9  |
| 29-Nov-2020 05:00             | 70.6   | 73.7 | 63.3 | 82.7  | 57.0  |
| 29-Nov-2020 05:30             | 75.1   | 74.8 | 65.3 | 102.9 | 58.2  |
| 29-Nov-2020 06:00             | 73.2   | 75.8 | 67.1 | 90.2  | 57.3  |
| 29-Nov-2020 06:30             | 74.8   | 77.2 | 69.0 | 89.0  | 61.3  |
| 29-Nov-2020 07:00             | 75.7   | 77.4 | 70.4 | 98.5  | 65.1  |
| 29-Nov-2020 07:30             | 75.7   | 77.6 | 70.9 | 97.7  | 62.6  |
| 29-Nov-2020 08:00             | 77.5   | 78.0 | 72.1 | 103.4 | 65.2  |
| 29-Nov-2020 08:30             | 76.4   | 78.3 | 72.4 | 93.8  | 67.0  |
| 29-Nov-2020 09:00             | 77.0   | 78.1 | 73.2 | 97.4  | 67.8  |
| 29-Nov-2020 09:30             | 76.6   | 78.3 | 73.4 | 94.3  | 69.7  |
| 29-Nov-2020 10:00             | 76.4   | 78.2 | 73.6 | 86.0  | 69.7  |
| 29-Nov-2020 10:30             | 76.6   | 78.5 | 73.5 | 86.9  | 69.0  |
| 29-Nov-2020 11:00             | 76.4   | 77.9 | 73.9 | 89.3  | 69.8  |
| 29-Nov-2020 11:30             | 76.5   | 78.1 | 73.9 | 85.8  | 70.2  |
| 29-Nov-2020 12:00             | 76.6   | 78.2 | 74.2 | 82.5  | 71.0  |
| 29-Nov-2020 12:30             | 76.7   | 78.3 | 74.2 | 84.8  | 70.2  |
| 29-Nov-2020 13:00             | 77.4   | 78.2 | 74.3 | 103.9 | 70.8  |
| 29-Nov-2020 13:30             | 76.7   | 78.2 | 74.3 | 90.6  | 69.8  |
| 29-Nov-2020 14:00             | 76.9   | 78.4 | 74.6 | 86.9  | 69.0  |
| 29-Nov-2020 14:30             | 77.0   | 78.5 | 74.7 | 88.6  | 70.3  |
| 29-Nov-2020 15:00             | 76.9   | 78.4 | 74.6 | 85.0  | 68.8  |
| 29-Nov-2020 15:30             | 76.9   | 78.4 | 74.3 | 90.9  | 69.4  |
| 29-Nov-2020 16:00             | 76.5   | 78.0 | 74.4 | 85.4  | 70.0  |
| 29-Nov-2020 16:30             | 76.6   | 78.2 | 74.5 | 80.9  | 69.6  |
| 29-Nov-2020 17:00             | 76.4   | 78.1 | 73.8 | 84.7  | 67.4  |
| 29-Nov-2020 17:30             | 76.6   | 78.1 | 74.3 | 82.9  | 70.1  |
| 29-Nov-2020 18:00             | 76.4   | 77.9 | 74.4 | 85.5  | 70.0  |
| 29-Nov-2020 18:30             | 76.1   | 77.6 | 73.9 | 84.6  | 70.4  |
| 29-Nov-2020 19:00             | 76.0   | 77.7 | 73.3 | 88.9  | 67.8  |
| 29-Nov-2020 19:30             | 75.9   | 77.8 | 72.5 | 90.5  | 67.5  |
| 29-Nov-2020 20:00             | 75.6   | 77.6 | 72.4 | 84.3  | 65.9  |
| 29-Nov-2020 20:30             | 75.6   | 77.5 | 72.7 | 81.9  | 67.5  |
| 29-Nov-2020 21:00             | 76.0   | 77.7 | 73.3 | 86.4  | 68.9  |
| 29-Nov-2020 21:30             | 76.3   | 78.0 | 73.8 | 83.1  | 68.0  |
| 29-Nov-2020 22:00             | 76.5   | 78.1 | 74.0 | 85.9  | 69.7  |
| 29-Nov-2020 22:30             | 76.2   | 78.1 | 73.5 | 82.3  | 66.2  |
| 29-Nov-2020 23:00             | 75.6   | 77.6 | 72.6 | 83.8  | 66.5  |
| 29-Nov-2020 23:30             | 75.2   | 77.4 | 71.9 | 84.2  | 65.7  |
| 30-Nov-2020 00:00             | 74.2   | 76.6 | 70.3 | 82.4  | 61.0  |
| 30-Nov-2020 00:30             | 73.6   | 76.0 | 68.7 | 88.0  | 61.9  |
| 30-Nov-2020 01:00             | 74.1   | 75.5 | 67.3 | 99.1  | 59.5  |
| 30-Nov-2020 01:30             | 71.5   | 74.4 | 65.0 | 83.6  | 54.9  |
| 30-Nov-2020 02:00             | 70.4   | 73.7 | 63.1 | 82.8  | 56.6  |
| 30-Nov-2020 02:30             | 69.6   | 73.1 | 61.8 | 80.1  | 55.4  |
| 30-Nov-2020 03:00             | 69.9   | 72.9 | 61.4 | 89.7  | 54.4  |
| 30-Nov-2020 03:30             | 69.4   | 73.0 | 60.6 | 80.9  | 50.7  |
| 30-Nov-2020 04:00             | 68.1   | 71.9 | 58.8 | 80.4  | 49.8  |
| 30-Nov-2020 04:30             | 68.4   | 72.0 | 59.6 | 84.0  | 50.0  |
| 30-Nov-2020 05:00             | 70.5   | 72.8 | 60.1 | 94.2  | 51.6  |
| 30-Nov-2020 05:30             | 70.7   | 74.0 | 63.5 | 83.5  | 54.8  |
| 30-Nov-2020 06:00             | 72.1   | 75.1 | 66.1 | 85.7  | 57.2  |
| 30-Nov-2020 06:30             | 74.2   | 76.9 | 69.8 | 85.0  | 61.9  |
| 30-Nov-2020 07:00             | 76.9   | 78.8 | 74.0 | 85.8  | 67.9  |
| 30-Nov-2020 07:30             | 77.4   | 78.9 | 75.4 | 84.0  | 72.5  |
| 30-Nov-2020 08:00             | 77.0   | 78.5 | 75.2 | 87.0  | 72.7  |
| 30-Nov-2020 08:30             | 76.7   | 78.1 | 74.8 | 85.6  | 72.4  |
| 30-Nov-2020 09:00             | 77.0   | 78.2 | 75.4 | 85.7  | 72.6  |
| 30-Nov-2020 09:30             | 77.5   | 78.8 | 75.6 | 90.4  | 73.3  |
| 30-Nov-2020 10:00             | 77.8   | 79.0 | 76.0 | 87.0  | 72.3  |
| 30-Nov-2020 10:30             | 78.0   | 78.8 | 75.1 | 95.0  | 71.1  |
| 30-Nov-2020 11:00             | 76.8   | 78.5 | 74.3 | 85.0  | 70.0  |
| 30-Nov-2020 11:30             | 77.2   | 78.8 | 74.7 | 90.6  | 69.8  |

Result

Background\_Noise\_Summary.xlsx

P:\60604728\1.06-ENV.EIA\Others\Noise\Background Noise Measurement\

## Appendix 4.19 Background Noise Measurement

| Measurement<br>Start Time [2] | Noise Levels at Noise Measurement Point, dB(A) [1] |      |      |       |       |
|-------------------------------|--|------|------|-------|-------|
|                               | LAeq   | LA10 | LA90 | LAMax | LAMin |
| 30-Nov-2020 12:00             | 77.2   | 78.8 | 74.5 | 81.8  | 71.0  |
| 30-Nov-2020 12:30             | 77.2   | 78.5 | 75.5 | 87.4  | 71.8  |
| 30-Nov-2020 13:00             | 77.1   | 78.5 | 75.4 | 84.7  | 70.4  |
| 30-Nov-2020 13:30             | 77.0   | 78.4 | 75.1 | 83.3  | 71.7  |
| 30-Nov-2020 14:00             | 77.2   | 78.6 | 75.3 | 84.7  | 71.0  |
| 30-Nov-2020 14:30             | 77.1   | 78.6 | 74.9 | 86.6  | 71.4  |
| 30-Nov-2020 15:00             | 77.2   | 78.5 | 75.5 | 85.8  | 72.1  |
| 30-Nov-2020 15:30             | 77.1   | 78.4 | 75.4 | 84.0  | 72.0  |
| 30-Nov-2020 16:00             | 77.2   | 78.4 | 75.2 | 94.1  | 72.2  |
| 30-Nov-2020 16:30             | 77.0   | 78.3 | 75.1 | 93.9  | 72.2  |
| 30-Nov-2020 17:00             | 76.7   | 78.1 | 75.0 | 84.2  | 71.2  |
| 30-Nov-2020 17:30             | 76.6   | 78.1 | 74.8 | 87.4  | 72.3  |
| 30-Nov-2020 18:00             | 75.5   | 77.0 | 73.5 | 83.9  | 68.9  |
| 30-Nov-2020 18:30             | 75.0   | 76.5 | 73.0 | 84.4  | 70.2  |
| 30-Nov-2020 19:00             | 74.6   | 76.2 | 72.5 | 83.1  | 69.3  |
| 30-Nov-2020 19:30             | 74.6   | 76.1 | 72.7 | 83.9  | 70.2  |
| 30-Nov-2020 20:00             | 74.9   | 76.5 | 72.7 | 82.9  | 69.8  |
| 30-Nov-2020 20:30             | 75.5   | 76.8 | 73.5 | 89.2  | 69.1  |
| 30-Nov-2020 21:00             | 75.7   | 77.4 | 73.2 | 84.5  | 68.0  |
| 30-Nov-2020 21:30             | 76.2   | 77.9 | 73.1 | 94.3  | 66.2  |
| 30-Nov-2020 22:00             | 76.3   | 78.0 | 73.8 | 89.3  | 68.5  |
| 30-Nov-2020 22:30             | 76.0   | 77.8 | 73.1 | 84.3  | 68.0  |
| 30-Nov-2020 23:00             | 75.8   | 77.7 | 72.7 | 87.8  | 67.8  |
| 30-Nov-2020 23:30             | 75.4   | 77.6 | 71.9 | 86.7  | 66.0  |

|                      |    |    |    |     |    |
|----------------------|----|----|----|-----|----|
| Day time Minimum     | 75 | 76 | 70 | 81  | 63 |
| Evening time Minimum | 75 | 76 | 72 | 82  | 66 |
| Night time Minimum   | 68 | 72 | 59 | 80  | 50 |
| Day time Maximum     | 78 | 79 | 76 | 104 | 73 |
| Evening time Maximum | 76 | 78 | 74 | 94  | 70 |
| Night time Maximum   | 76 | 78 | 73 | 103 | 68 |

### With Façade Correction

|                      |    |    |    |     |    |
|----------------------|----|----|----|-----|----|
| Day time Minimum     | 78 | 79 | 73 | 84  | 66 |
| Evening time Minimum | 78 | 79 | 75 | 85  | 69 |
| Night time Minimum   | 71 | 75 | 62 | 83  | 53 |
| Day time Maximum     | 81 | 82 | 79 | 107 | 76 |
| Evening time Maximum | 79 | 81 | 77 | 97  | 73 |
| Night time Maximum   | 79 | 81 | 76 | 106 | 71 |

Remarks: [1] Free field noise measurements

[2] Shaded cells indicate Sunday measurements

Equipment Serial No.: 3001291