

# Environmental Noise Assessment

## 125 Simcoe Road

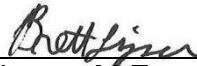
### Proposed Mixed-use Development Town of Bradford West Gwillimbury

February 1, 2022  
Project: 121-0492

Prepared for

### County of Simcoe

Prepared by



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**VALCOUSTICS**

*Canada Ltd.*

## Version History

Version #	Date	Comments
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# Environmental Noise Assessment

## 125 Simcoe Road

### Proposed Mixed-use Development

Town of Bradford West Gwillimbury

#### **EXECUTIVE SUMMARY**

Valcoustics Canada Ltd. (VCL) was retained to prepare an Environmental Noise Assessment report addressing the potential noise impact from the existing environment onto the proposed development as well as the noise impact from the proposed development on the surrounding environment.

The proposed development is a 4-storey “L”-shaped residential building at the southwest corner of the site. The ground floor will include leasable space, government offices, and community program spaces as well as residential suites. Common indoor amenity space for the residents will be provided at the ground and 2<sup>nd</sup> floors. Common outdoor amenity space will be provided at grade as well as at the third floor. Parking spaces will be provided at grade.

The significant transportation noise source in the vicinity is road traffic on Simcoe Road and Marshview Boulevard. The significant stationary noise sources in the vicinity are the Bradford Curling Club and the Bradford and District Memorial Community Centre.

The sound levels on site have been determined and compared with the applicable Ministry of the Environment, Conservation and Parks (MECP) noise guideline limits to determine the need for noise mitigation.

To meet the applicable transportation noise source guideline limits:

- All suites require mandatory air conditioning. Note that the building design includes air conditioning, thus meeting this requirement;
- At all dwellings units, exterior wall and window construction meeting the minimum non-acoustical requirements of the Ontario Building Code (OBC) will be sufficient to meet the indoor criteria; and
- Sound barriers are not required for noise control purposes.

The stationary noise levels due to the curling club and community centre are predicted to meet the guideline limits without any additional mitigation measures.

The main noise sources associated with the proposed development are the rooftop mechanical units. With the proposed rooftop mechanical units, sound level excesses are predicted to occur at the nearby dwellings. To meet the applicable stationary noise source guideline limits, it is recommended that the rooftop chillers include the sound insulation option as described in the product catalogue.

## **1.0 INTRODUCTION**

Valcoustics Canada Ltd. (VCL) was retained to prepare an Environmental Noise Assessment for the proposed development in support of the Site Plan Approval (SPA) application submission to the Town of Bradford West Gwillimbury.

The potential sound levels and noise mitigation measures for the proposed development to comply with the Ministry of the Environment, Conservation and Parks (MECP) noise guideline requirements are outlined herein.

### **1.1 SITE DESCRIPTION**

The site is located at the northeast corner of the intersection of Simcoe Road and Marshview Boulevard in the Town of Bradford West Gwillimbury. The site is bounded by:

- Existing open space, with Marshview Boulevard beyond, to the east;
- An existing detached residential dwelling (plus shed) as well as the Bradford Curling Club (and associated parking), with Edward Street beyond, to the north;
- Simcoe Road, with existing detached and apartment dwellings, to the west; and
- Marshview Boulevard, with existing detached residential dwellings beyond, to the south.

Figure 1 shows the Key Plan.

This report is based on the architectural drawing set prepared by MCL Architects, dated October 19, 2021. The Site Plan from the drawing set is shown as Figure 2.

### **1.2 PROPOSED DEVELOPMENT**

The proposed development is a 4-storey “L”-shaped residential building at the southwest corner of the site. The ground floor will include leasable space, government offices, and community program spaces as well as residential suites. Common indoor amenity space for the residents will be provided at the ground and 2<sup>nd</sup> floors. Common outdoor amenity space will be provided at grade as well as at the third floor. Parking spaces will be provided at grade.

## **2.0 IMPACT OF THE ENVIRONMENT ONTO THE PROJECT**

### **2.1 NOISE SOURCES**

#### **2.1.1 Transportation Noise Sources**

The transportation noise source with potential for impact on the proposed development is road traffic on Simcoe Road and Marshview Boulevard.

Road traffic data for Simcoe Road was provided by the Town of Bradford West Gwillimbury for the year 2021 in the form of a 7-day hourly count. To be conservative, only the weekday volumes were used to determine an average traffic volume (since weekend volumes are lower). This data was projected to the year 2032 using a 2% growth rate, compounded annually. In the absence of truck count data, medium and heavy trucks were assumed to be 3% and 2%, respectively, of the total traffic volume. The day/night split was calculated from the hourly counts (excluding the weekend counts).

Traffic data for Marshview Boulevard was not available. Thus, the data for Simcoe Road was also applied to Marshview Boulevard. This is expected to be a conservative assumption based on the size of the right-of-way for the newly constructed road.

Due to low traffic volumes and screening from intervening developments, traffic on other local roadways in the vicinity is not expected to create a significant noise impact on the proposed development. Thus, these roadways have not been considered further in this assessment.

The road traffic data is shown in Appendix A and summarized in Table 1.

**TABLE 1 ROAD TRAFFIC DATA**

Roadway	24-hour Volume	% Trucks		Day/Night Split (%)	Speed Limit (km/h)
		Medium	Heavy		
Simcoe Road <sup>(1)</sup>	6 311 (7 847)	3	2	90/10	50
Marshview Boulevard <sup>(2)</sup>	6 311 (7 847)	3	2	90/10	50

**Notes:**

- (1) Road traffic volumes were obtained from the Town of Bradford West Gwillimbury. The weekend data was excluded from the analysis. Year 2021 volumes were projected to the year 2032 at a growth rate of 2%, compounded annually. The projected traffic volume is shown in brackets. Truck percentages were assumed.
- (2) The data for Simcoe Road was also applied to Marshview Boulevard

**2.1.2 Stationary Noise Sources**

The Bradford Curling Club is located approximately 46 metres north of the subject site (approximately 93 metres from the proposed building). The curling club is currently in operation and includes an indoor compressor unit on the south side of the building and an associated condenser unit on the roof of the compressor room. The curling club also includes a small residential-style air conditioning condenser unit on the south side of the building.

The Bradford and District Memorial Community Centre is immediately north of the curling club. The function of the Community Centre has been reduced significantly with the cooling system for the ice pad having been decommissioned. Currently, the usage of the community centre is limited to ball hockey on the ice pad and community/private functions in the ancillary spaces. The community centre includes various rooftop packaged air conditioning units on top of the ancillary spaces at the west end of the building.

Sound measurements and observations at the above noted facilities were done by VCL staff on November 25, 2021.

## 2.2 ENVIRONMENTAL NOISE GUIDELINES

The applicable noise guidelines for use in development applications for both stationary sources and sensitive land uses are those in MECP Publication NPC-300, “Environmental Noise Guideline, Stationary and Transportation Sources – Approval and Planning”. The environmental noise guidelines of the MECP, as provided in Publication NPC-300, are discussed briefly below and summarized in Appendix A.

### 2.2.1 MECP Publication NPC-300 – Transportation Noise Sources

#### 2.2.1.1 Architectural Elements

In the daytime, the indoor criterion for road noise is  $L_{eq\ Day}^{(1)}$  of 45 dBA for sensitive spaces such as living/dining rooms, dens and bedrooms. At night, the indoor criterion for road noise is  $L_{eq\ Night}^{(2)}$  of 45 dBA for sensitive spaces such as living/dining rooms and dens and 40 dBA for bedrooms.

The architectural design of the building envelope (walls, windows, etc.) must provide adequate sound isolation to achieve these indoor sound level limits.

#### 2.2.1.2 Ventilation

In accordance with the MECP noise guideline for road traffic sources, if the daytime sound level,  $L_{eq\ Day}$ , at the exterior face of a noise sensitive window is greater than 65 dBA, means must be provided so that windows can be kept closed for noise control purposes and central air conditioning is required. For daytime sound levels between 56 dBA and 65 dBA inclusive, there need only be the provision for adding air conditioning at a later date. A warning clause advising the occupant of the potential interference with some activities is also required. At nighttime, air conditioning would be required when the sound level exceeds 60 dBA ( $L_{eq\ Night}$ ) at a noise sensitive window (provision for adding air conditioning is required when greater than 50 dBA).

#### 2.2.1.3 Outdoors

For outdoor amenity areas (“Outdoor Living Areas” - OLA’s), the guideline is 55 dBA  $L_{eq\ Day}$  (0700 o 2300 hours), with an excess not exceeding 5 dBA considered acceptable if it is technically not practicable to achieve the 55 dBA objective, providing warning clauses are registered on title. Note that for road traffic sources, a balcony is not considered an OLA, unless it is:

- the only OLA for the occupant;
- at least 4 m in depth; and
- unenclosed.

(1) 16-hour energy equivalent sound level (0700-2300 hours).

(2) 8-hour energy equivalent sound level (2300-0700 hours).

Note that NPC-300 defines OLA's as areas that are "intended and designed for the quiet enjoyment of the outdoor environment" and that are "readily accessible from the building".

## **2.2.2 MECP Publication NPC-300 – Stationary Noise Sources**

Stationary sources are treated differently by the MECP guideline than transportation sources of noise such as road traffic and railways. Stationary source noise criteria used for noise impact assessments are dependent on the type of area and the ambient sound environment. The site and area are Class 1, i.e., an area where the ambient sound environment is dominated by "urban hum", primarily traffic noise. This is due to the proximity of the area road network.

### **2.2.2.1 Sound Level Criteria**

MECP Publication NPC-300 states that the guideline limits shall be defined by the higher of the ambient sound level, due to road traffic noise, or the minimum exclusion limits for a Class 1 area of 50 dBA daytime (0700 to 1900 hours), 50 dBA evening (1900 to 2300 hours) and 45 dBA nighttime (2300 to 0700 hours) at a noise sensitive plane of window. The minimum exclusion limits are 50 dBA in the daytime and evening at an outdoor point of reception. The guideline does not apply to outdoor points of reception at night.

The MECP requires a "worst case" one-hour operating scenario be analysed. This would occur when the stationary noise source exceeds the ambient or exclusion limit by the greatest margin.

The guideline limits apply to habitable spaces such as living/dining/family rooms and sleep areas. No indoor sound level guidelines are provided for stationary sources.

### **2.2.2.2 Applicable Guideline Limits**

Based on the orientation of the building on the site, the worst case receptors (with regard to the stationary sources to the north) will be well screened from road traffic noise emanating from the surrounding roadways. As such, the exclusion limits will be used at the worst case receptor locations in this analysis.

## **2.3 NOISE IMPACT ASSESSMENT – TRANSPORTATION NOISE SOURCES**

Using the road traffic data in Table 1, the sound levels, in terms of  $L_{eq\ Day}$  and  $L_{eq\ Night}$ , were determined using STAMSON V5.04 – ORNAMENT, the computerized road traffic noise prediction model of the MECP.

Daytime and nighttime sound levels at the building facades were calculated at a height of 11.5 m above grade, representing the top storey windows (the worst case locations). Daytime OLA sound levels were calculated at a height of 1.5 m above grade or above the terrace floor, at the centre of the amenity space. Inherent screening of each building face due to its orientation to the noise source is accounted for.

Table 2 summarizes the predicted sound levels outdoors at specific locations. A sample sound level calculation is contained in Appendix C.

The highest unmitigated daytime and nighttime facade sound levels of 63 dBA and 56 dBA, respectively, are predicted to occur at the south facade of the building, adjacent to Marshview Boulevard.

**TABLE 2 PREDICTED OUTDOOR SOUND LEVELS DUE TO ROAD TRAFFIC**

Location <sup>(1)</sup>	Source	Distance (m) <sup>(2)</sup>	L <sub>eq</sub> Day (dBA)	L <sub>eq</sub> Night (dBA)
Southwest Corner (West Facade)	Simcoe Road	28	60	54
	Marshview Boulevard	22	58	52
	<b>TOTAL</b>	-	<b>62</b>	<b>56</b>
Southwest Corner (South Facade)	Simcoe Road	28	57	51
	Marshview Boulevard	22	61	55
	<b>TOTAL</b>	-	<b>63</b>	<b>56</b>
Grade-Level Common Outdoor Amenity Area (OLA)	Marshview Boulevard	39	57	-
3 <sup>rd</sup> Floor Common Outdoor Amenity Area (OLA)	Simcoe Road	34	58	-
	Marshview Boulevard	29	53	-
	<b>TOTAL</b>	-	<b>59</b>	-

Notes:

- (1) See Figure 2 for receptor locations.
- (2) Distance indicated is from the centreline of the noise source to the point of reception.

**2.3.1 Noise Abatement Requirements - Transportation Noise Sources**

The noise control measures can generally be classified into two categories which are interrelated, but which the designer can treat separately for the most part:

- a) Architectural elements to achieve acceptable indoor noise guidelines;
- b) Design features to protect the OLA's.

Noise abatement requirements are summarized on Figure 2 and in Table 3 along with the notes to Table 3.

**2.3.1.1 Indoors - Architectural Elements**

The indoor noise level guidelines can be achieved by using appropriate construction for exterior walls, windows and doors. The exterior wall and window requirements were calculated using the floor plan and elevation drawings from the architectural drawing set. In determining the worst-case architectural requirements for the dwelling units, wall and window areas were calculated for the 4<sup>th</sup> floor Suite C corner bedroom:

- The south wall and window areas were calculated to be 72% and 25%, respectively, of the associated floor area.
- The west wall and window areas were calculated to be 89% and 25%, respectively, of the associated floor area.

Based on the predicted sound levels, exterior wall and window construction meeting the minimum non-acoustical requirements of the OBC will be sufficient to meet the indoor noise criteria for transportation noise.

#### 2.3.1.2 Indoors - Ventilation Requirements

Based on the predicted sound levels, all suites in the development require the provision for adding air conditioning at a later date. In mid-rise construction, such as the proposed development, the provision for adding air conditioning requirement is typically not practical to implement. Thus, the requirement has been increased to mandatory air conditioning, which exceeds the minimum requirement.

The mechanical plans show that all suites will be provided with air conditioning, thus meeting this requirement.

#### 2.3.1.3 Outdoors

The unmitigated daytime OLA sound level at the grade level and 3<sup>rd</sup> floor common outdoor amenity areas are predicted to be below the 60 dBA design maximum permitted under MECP guidelines. Thus, sound barriers are not considered mandatory for transportation noise sources.

#### 2.3.1.4 Warning Clauses

Warning clauses are a tool to inform prospective owners/occupants of potential annoyance due to existing noise sources. Where the guideline sound level limits are exceeded, appropriate warning clauses should be registered on title or included in the development agreement that is registered on title. The warning clauses should also be included in agreements of Offers of Purchase and Sale and lease/rental agreements to make future occupants aware of the potential noise situation. Locations requiring warning clauses and the appropriate wording are given in Table 3 and in the notes to Table 3, respectively.



**TABLE 3 NOISE ABATEMENT MEASURES – TRANSPORTATION SOURCES**

Location	Air Conditioning <sup>(1)</sup>	Exterior Wall <sup>(2)</sup>	Exterior Window <sup>(3)</sup>	Sound Barrier <sup>(4)</sup>	Warning Clauses <sup>(5)</sup>
All suites	Mandatory	No special acoustical requirements		None	A + B + C

**Notes:**

- (1) Where means must be provided to allow windows to remain closed for noise control purposes, a commonly used technique is that of air conditioning. Air conditioning equipment must comply with any guidelines laid out within the local municipal code.
- (2) STC - Sound Transmission Class Rating (Reference ASTM-E413).  
STC values are based on Floor Plan and Elevation drawings prepared by MCL Architects, dated October 19, 2021. Requirements should be checked if the design changes significantly
- (3) STC - Sound Transmission Class Rating (Reference ASTM-E413). A sliding glass walkout door should be considered as a window and be included in the percentage of glazing.  
STC values are based on Floor Plan and Elevation drawings prepared by MCL Architects, dated October 19, 2021. Requirements should be checked if the design changes significantly
- (4) Sound barriers must be of solid construction having a minimum face density of 20 kg/m<sup>2</sup> with no gaps or cracks. The acoustic fence height shown is taken relative to grade.
- (5) Warning clauses to be registered on title and be included in Offers of Purchase and Sale for designated lots:
  - A. "Purchasers/tenants are advised that despite the inclusion of noise control features in the development and within the building units, sound levels due to increasing road traffic may occasionally interfere with some activities of the dwelling occupants as the sound level may exceed the noise criteria of the Ministry of the Environment, Conservation and Parks and/or the municipality."
  - B. "This dwelling unit has been supplied with an air conditioning system which will allow windows and doors to remain closed, thereby ensuring that the indoor sound levels are within the sound level limits of the Municipality and the Ministry of the Environment, Conservation and Parks."
  - C. "Purchasers/tenants are advised that due to the proximity of the existing Bradford Curling Club and the Bradford and District Memorial Community Centre, sound levels from these facilities may at times be audible."
- (6) All exterior doors shall be fully weather-stripped.

## 2.4 NOISE IMPACT ASSESSMENT – STATIONARY NOISE SOURCES

### 2.4.1 Facilities

The stationary noise sources in the vicinity with the potential to impact the subject site are the Bradford Curling Club and the Bradford and District Memorial Community Centre.

The noise source locations are shown on Figure 3. The source ID's and sound power levels for each facility are summarized in Table 4.

#### 2.4.1.1 Bradford Curling Club

The noise sources at this facility with the potential for impact at the subject site are the condenser unit located on top of the compressor room and the residential-style air conditioning outdoor condenser unit located on the south Facade of the building. Given the nature of the operation, the noise sources could be called on to operate at any time of day or night.

Measurements of the rooftop condenser unit were completed during the site visit on November 25, 2021. The outdoor AC unit is small and based on the distance separation is not expected to impact the subject site.

#### 2.4.1.2 Bradford and District Memorial Community Centre

The noise sources at this facility with the potential for impact at the subject site are the packaged rooftop air conditioning units located on the roof towards the west extent of the building. As noted above, the cooling system for the ice pad has been decommissioned and is no longer operational. VCL staff were not able to access the roof to measure the equipment. However, the cooling tonnage of each unit was provided. Thus, the sound data for the rooftop units were taken from the Lennox sound datasheet, which is representative of typical rooftop units.

**TABLE 4 IMPACT OF ENVIRONMENT ON PROJECT - SOUND SOURCE SUMMARY**

Source ID(1)	Description	Source Sound Power Level (dBA)	Source Height (m) <sup>(2)</sup>	Operating Time (min/hour)	
				Day / Evening (0700 to 2300)	Night (2300 to 0700)
EP_curling_condenser	Condenser Unit	91	1.2	60	60
EP_RTU_10T	Rooftop HVAC unit	88	1.2	60	30
EP_RTU_10T	Rooftop HVAC unit	88	1.2	60	30
EP_RTU_7T	Rooftop HVAC unit	88	1.2	60	30
EP_RTU_5T	Rooftop HVAC unit	81	1.2	60	30

**Notes:**

- (1) See Figure 3.
- (2) Heights are relative to the top of the roof.

#### 2.4.2 Operating Scenarios

Operating scenarios that represent the daytime/evening (0700 to 2300) and nighttime (2300 to 0700 hours) criterion periods were assessed. The scenarios considered reflect worst case operating conditions, as required by the MECP guidelines, that would not be expected to occur on a regular basis, and perhaps only occasionally. In practice, it is expected that actual operating activities will be less than considered in this report.

The operating scenarios assessed are:

- Daytime/evening scenario hours (0700 to 2300 hours):
  - All HVAC units operating at 100% duty cycle (each unit operates for one full hour).
  - Curling condenser unit operating at 100% duty cycle (full hour).

- Nighttime scenario hours (2300 to 0700 hours):
  - All HVAC units operating at 50% duty cycle (each unit operates for one half hour).
  - Curling condenser unit operating at 100% duty cycle (full hour).

### 2.4.3 Analysis

At each of the assessment receptor locations, the following procedures were used to assess potential noise impact from the mixed-use building on the proposed residential development.

- 1) A 3-D acoustic model of the facilities, as shown in Figure 3, was developed using CadnaA V2021 MR2 environmental noise modelling software, which follows the protocol of the ISO Standard 9613.2, “Acoustics – Attenuation of Sound During Propagation in Outdoors”, to determine the predicted sound levels at the building facades. Accounting for distance attenuation and ground attenuation, the sound exposure from all the relevant noise sources (hourly Leq) was determined for each receptor position, for the operating scenarios described in Section 2.4.2 above.
- 2) Hard ground ( $G = 0$ ) was used for the roadways and the paved areas. Soft ground ( $G = 1$ ) was used elsewhere.
- 3) Two orders of sound reflection from the building facades were included in the assessment.
- 4) The sound levels around the building facades were assessed using the Building Evaluation feature in CadnaA, which calculates the sound levels at points around the facade, at each storey. The sound levels in common outdoor amenity areas were assessed using a Grid calculation. The receptors shown in the figures represent the worst-case locations.

Reference source sound levels, activity assumptions and calculations are found in Appendix D.

### 2.4.4 Predicted Sound Levels

Figure 3 shows the predicted unmitigated sound levels at the proposed development due to the nearby stationary sources. The numbers in the octagons represent the highest sound level at any storey, at the corresponding location on the building facades.

The grade-level outdoor amenity area was assessed as a discrete receptor. The outdoor amenity area on the southwest corner of the building is significantly screened from the stationary sources by the proposed building. It is therefore expected that these areas will meet the MECP guideline limits.

As shown in Figure 3, there are no sound level excesses over the Class 1 guideline limits that are predicted to occur due to the nearby stationary noise sources. Thus, mitigation measures are not required.

### 3.0 IMPACT OF THE PROJECT ONTO THE ENVIRONMENT

#### 3.1 NOISE SOURCES

The building will have rooftop mechanical equipment (Chillers, HVAC units and ERU's). The locations of the mechanical units are shown on the mechanical drawing set, prepared by Tristar Engineering, dated January 11, 2022.

Sound data for the rooftop chiller units, A/C split units and ERU's was provided by the mechanical engineers. For the rooftop chiller units, data is available for units both with and without sound insulation. To be conservative, the data for the units without sound insulation was used in the unmitigated assessment.

The sound power level for the A/C split units was calculated to be 62 dBA, which is significantly lower than the power levels for the ERU and chiller units. Thus, these units are expected to have an insignificant impact on the nearby noise-sensitive receptors and were not included in the model.

Note that an emergency generator is also proposed to be located on the rooftop. The specific design of the unit, enclosure and sound data are not yet available. As per the MECP guidelines, impacts from standby power systems are to be assessed separately from other stationary noise sources (and have specific sound level limits). Based on the above, it is recommended that the assessment of generator be deferred to a later submission and thus, has not been included in this assessment.

The source locations are shown on Figure 4. The source sound power levels are summarized in Table 5.

**TABLE 5 IMPACT OF PROJECT ON ENVIRONMENT - SOUND SOURCE SUMMARY**

Source ID <sup>(1)</sup>	Description	Make and Model	Source Sound Power Level (dBA)	Source Height (m) <sup>(2)</sup>	Operating Time (min/hour)	
					Day / Evening (0700 to 2300)	Night (2300 to 0700)
PE_ERU	Rooftop Energy Recovery Unit	Daikin RDS802C	90	1.85	60	60
PE_C_1	Rooftop Chiller Unit	Daikin AGZ101E	94	2.51	60	30
PE_C_2	Rooftop Chiller Unit	Daikin AGZ101E	94	2.51	60	30

Notes:

- (1) See Figure 4.
- (2) Heights are relative to the top of the roof.

### 3.2 ENVIRONMENTAL NOISE GUIDELINES

The applicable sound level limits for noise emissions from the proposed building are the same as those described in Section 2.2 above for the curling club and community centre (but in this case the limits apply at neighbouring noise sensitive land uses as opposed to applying at the subject site).

As above, the exclusion limits will be used for all receptor locations. This is likely a conservative assumption for those dwellings fronting onto Simcoe Road or siding onto Marshview Boulevard as the exposed facades of these dwellings will also experience elevated ambient sound levels from the adjacent/intervening roadways.

### 3.3 OPERATING SCENARIOS

For the mechanical equipment, the two “worst case” scenarios were assessed. The scenarios considered reflect operating conditions beyond that which would be expected to occur on a regular basis, and perhaps occur only occasionally. In practice, it is expected that actual operating activities will be less than considered in this report, making the analysis conservative.

The two operating scenarios analysed are:

- Daytime/Evening Scenario Hours (any hour between 0700 and 2300):
  - The rooftop chiller units and ERU operate for the full hour.
- Nighttime Scenario Hour (any hour between 2300 and 0700):
  - The chiller units operate at 50% duty cycle (30 minutes out of the hour); and
  - The ERU operates for the full hour.

### 3.4 ANALYSIS METHOD

The following procedures were used to assess potential noise impacts of the proposed residential development on the environment:

- A 3-D acoustic model of the relevant sources, identified above, as shown in Figure 4, was developed using CadnaA V2021 MR2 environmental noise modelling software, which follows the protocol of the ISO Standard 9613-2, “Acoustics – Attenuation of Sound During Propagation in Outdoors”, to determine the predicted sound levels at each of the receptor locations. Accounting for distance attenuation, ground attenuation, atmospheric effects and inherent screening, where present, the sound level (1-hour  $L_{eq}$ ) was calculated.
- Hard ground ( $G = 0$ ) was used for the roadways and the paved areas. Soft ground ( $G = 1$ ) was used elsewhere.
- Two orders of sound reflection from the building facades were included in the assessment.
- The sound levels around the building facades were assessed using the Building Evaluation feature in CadnaA, which calculates the sound levels at points around the facade, at each storey. The sound levels in common outdoor amenity areas were assessed using a Grid calculation. The receptors shown in the figures represent the worst-case locations.

Reference source sound levels, activity assumptions and calculations are found in Appendix D.

### 3.5 PREDICTED SOUND LEVELS

Figure 4 shows the predicted unmitigated sound levels at the nearby noise-sensitive receptors due to the proposed development. The numbers in the octagons represent the highest sound level at any storey, at the corresponding location on the building facades. The red octagons indicate sound level excesses over the guideline limit. The grade-level outdoor amenity area was assessed as a discrete receptor.

As shown in Figure 4, sound level excesses over the Class 1 nighttime guideline limits are predicted to at the dwelling at 169 Simcoe Road due to the proposed development. Thus, mitigation measures are required.

### 3.6 MITIGATION

To meet the Class 1 guideline limits at the nearby receptors, it is recommended that the chiller units include the sound insulation option described in the product catalogue. This would lower the sound power level from 94 to 88 dBA. Figure 5 shows the predicted mitigated sound levels at the nearby noise-sensitive receptors due to the proposed development with sound insulation included for the chiller units.

## 4.0 CONCLUSIONS

With the appropriate design of the development, a suitable acoustical environment can be provided for the occupants and the applicable MECP noise guideline requirements can be met. Future occupants will be made aware of the potential noise situation through warning clauses, as per MECP guidelines.

## 5.0 REFERENCES

1. "Environmental Noise Guideline, Stationary and Transportation Sources - Approval and Planning", Ontario Ministry of the Environment, Publication NPC-300, August 2013.
2. Building Practice Note No. 56: "Controlling Sound Transmission into Buildings", by J. D. Quirt, Division of Building Research, National Council of Canada, September 1985.
3. PC STAMSON 5.04, "Computer Program for Road Traffic Noise Assessment", Ontario Ministry of the Environment and Climate Change.
4. "Acoustics – Attenuation of Sound during Propagation Outdoors – Part 2: General Method of Calculation", ISO 9613-2, December 15, 1996.
5. CadnaA version 2021 MR 2, DataKustik GmbH.





No.	Revision/Issue	Date

  
**VALCOUSTICS**  
*Canada Ltd.*

30 Wertheim Court, Unit 25  
 Richmond Hill, Ontario  
 Canada L4B 1B9  
 solutions@valcoustics.com  
 Phone: (905) 764-5223  
 Fax: (905) 764-6813

Title

**Key Plan**

Project No.

121-0492

Date

Jan. 29, 2022

Project Name

125 Simcoe Road, Bradford

Scale

N.T.S.

Figure

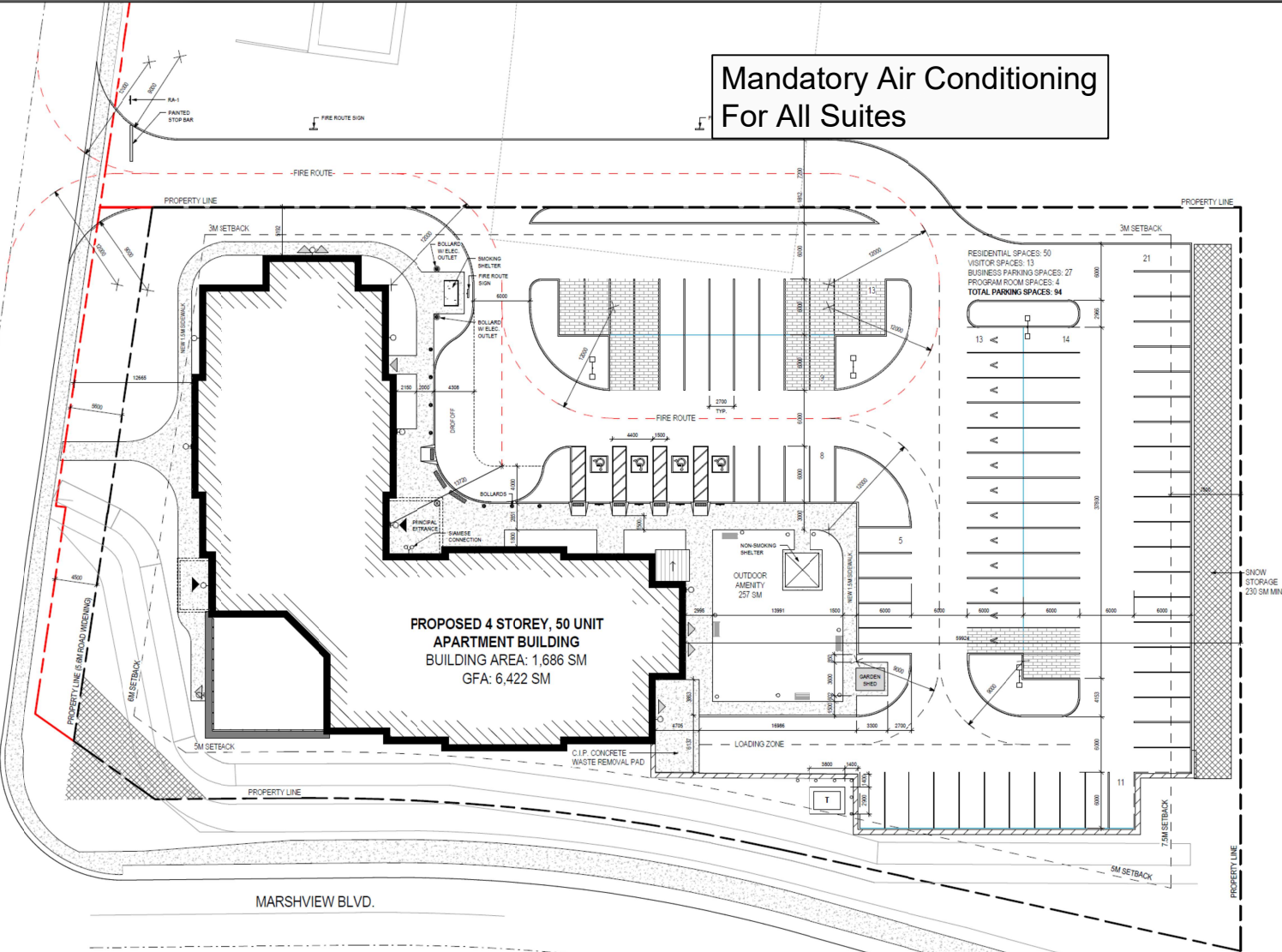
**1**





**Mandatory Air Conditioning  
For All Suites**

SIMCOE ROAD



MARSHVIEW BLVD.

BASE DRAWING BY MCL ARCHITECTS

1 SITE PLAN  
A11 1:300



30 Wertheim Court, Unit 25  
Richmond Hill, Ontario  
Canada L4B 1B9  
solutions@valcoustics.com  
Phone: (905) 764-5223  
Fax: (905) 764-6813

Title  
**Site Plan**

Project No.  
121-0492

Date  
Jan. 29, 2022

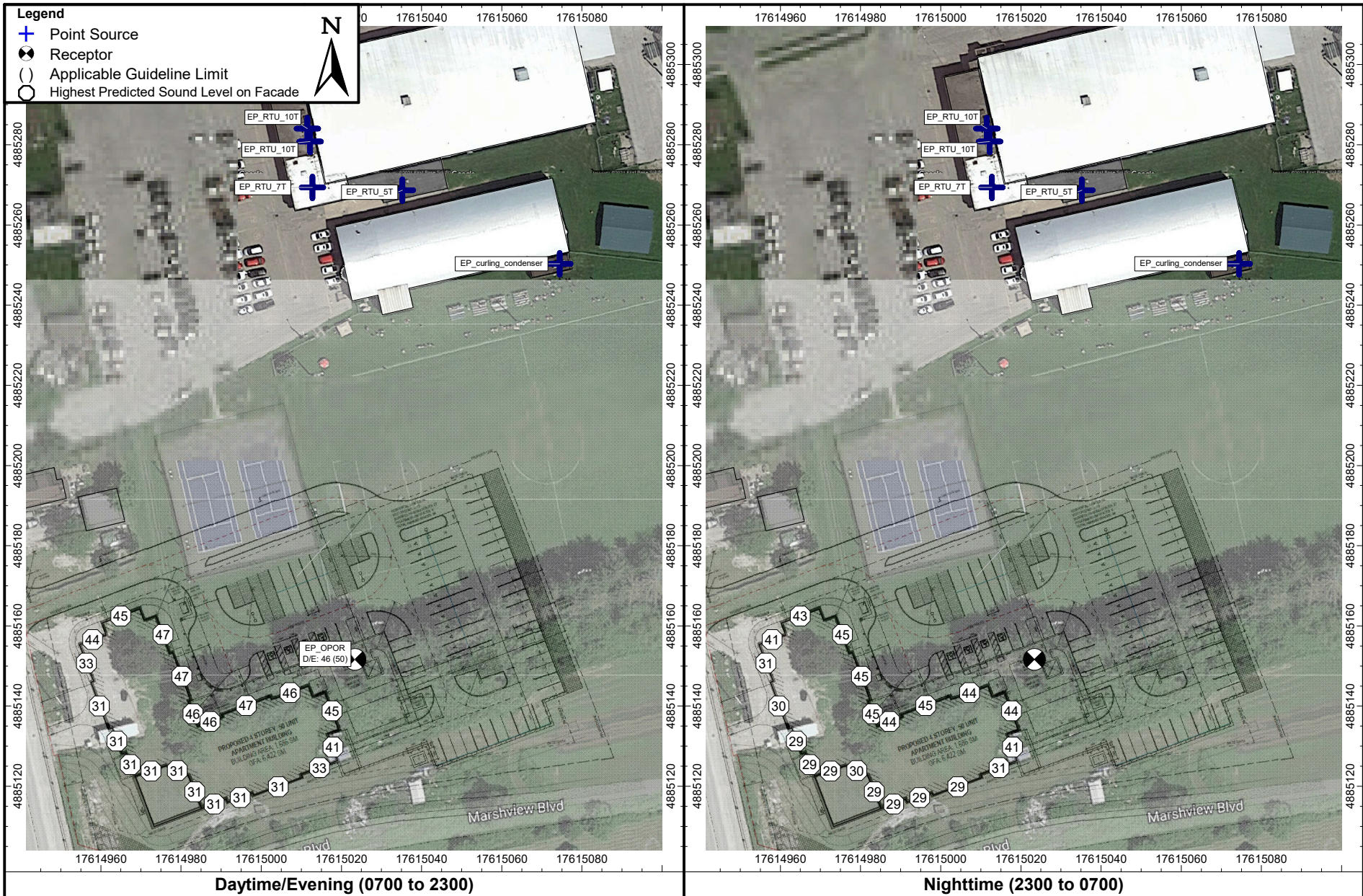
Project Name  
125 Simcoe Road, Bradford

Scale  
N.T.S.

Figure  
**2**

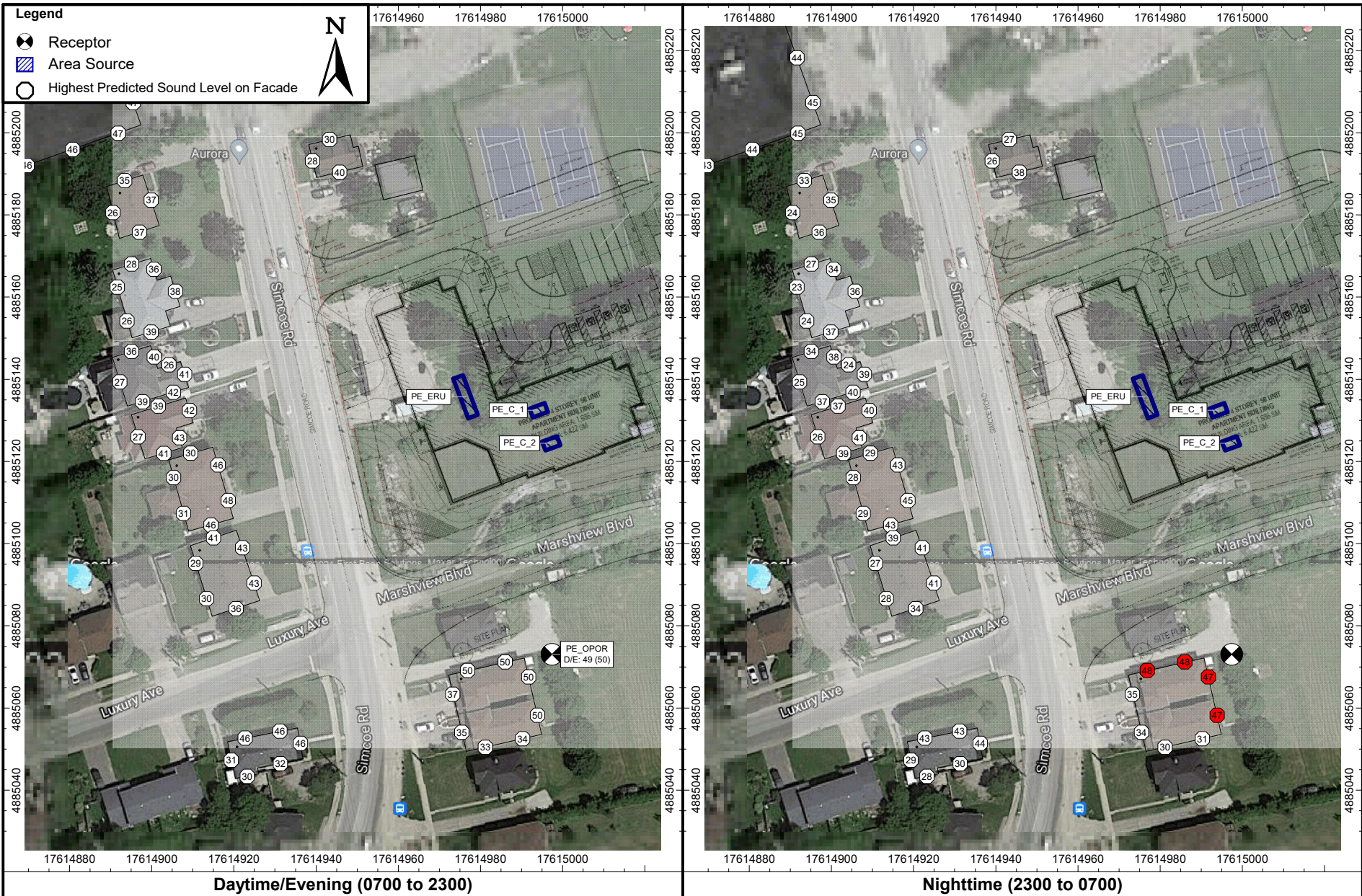
No.	Revision/Issue	Date





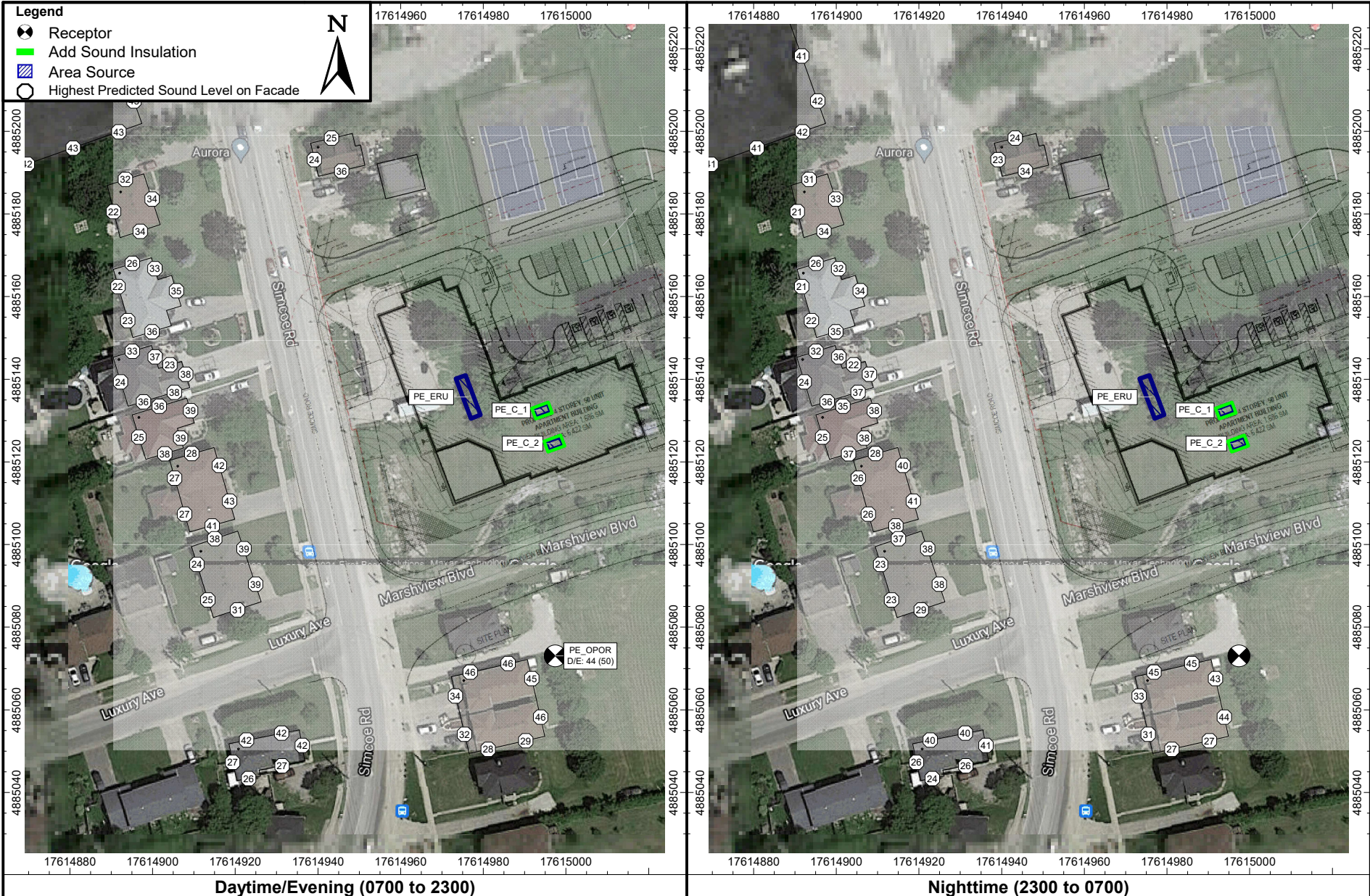
	Title	Date	Figure
	Project Name	Project No.	
	Impact of Environment On Project - Predicted Sound Levels (dBA)	Jan. 31, 2022	3
	125 Simcoe Road, Bradford	122-0492	





	Title	Date	Figure <b>4</b>
	Project Name	Project No.	
<b>Impact of Project On Environment - Predicted Unmitigated Sound Levels (dBA)</b> <b>125 Simcoe Road, Bradford</b>		<b>Jan. 31, 2022</b> <b>122-0492</b>	





	Title <b>Impact of Project On Environment - Predicted Mitigated Sound Levels (dBA)</b>	Date <b>Jan. 31, 2022</b>	Figure <b>5</b>
	Project Name <b>125 Simcoe Road, Bradford</b>	Project No. <b>122-0492</b>	



# **APPENDIX A**

## **ROAD TRAFFIC DATA**

**Ontario Traffic, Inc.**  
 17705 Leslie St., Unit 6  
 Newmarket, Ontario L3Y 3E3  
 Tel: (905) 898-7711 Fax: (905) 898-3664

Site Code: 148  
 Station ID: U239/U59  
 Simcoe Rd between Line 6 & Catania Ave

Date Start: 06-May-21  
 Date End: 12-May-21  
 Date Start: 06-May-21

NB	Start Time	1	16	24	32	40	48	56	64	72	80	89	97	105	113	121	Total	Average (Mean)	85th Percent
05/06/2																			
	1	0	0	2	0	4	1	2	0	0	0	0	0	0	0	0	9	43	56
	01:00	0	0	1	0	0	3	4	0	0	0	0	0	0	0	0	8	52	58
	02:00	0	0	0	0	0	2	2	0	0	0	0	0	0	0	0	4	56	56
	03:00	0	1	0	0	1	3	4	1	0	0	0	0	0	0	0	10	52	58
	04:00	0	0	1	1	1	10	16	6	0	0	0	0	0	0	0	35	57	64
	05:00	0	1	0	2	6	33	37	20	2	2	1	0	0	0	0	104	58	66
	06:00	0	0	0	2	5	55	81	29	4	1	0	0	0	0	0	177	58	65
	07:00	0	0	0	1	9	52	76	37	2	0	0	0	0	0	0	177	58	66
	08:00	3	4	1	5	18	63	62	19	0	0	0	0	0	0	0	175	53	62
	09:00	0	0	0	9	26	53	44	15	2	0	0	0	0	0	0	149	53	62
	10:00	0	0	3	4	19	61	58	5	0	0	0	0	0	0	0	150	53	61
	11:00	0	0	1	2	20	67	61	12	3	1	0	0	0	0	0	167	55	62
	12 PM	0	0	0	6	27	67	72	24	2	0	0	0	0	0	0	198	55	63
	13:00	0	1	0	1	21	75	65	16	1	1	0	0	0	0	0	181	55	62
	14:00	0	1	1	8	12	95	95	19	4	0	0	0	0	0	0	235	55	62
	15:00	0	2	2	6	23	106	89	27	4	1	1	0	0	0	0	261	55	63
	16:00	0	0	1	10	34	99	97	25	1	0	0	0	0	0	0	267	54	62
	17:00	1	1	1	1	33	90	101	35	2	1	0	0	0	0	0	266	56	63
	18:00	0	0	0	0	17	91	87	29	3	0	0	0	0	0	0	227	56	63
	19:00	0	0	1	4	15	58	47	16	1	0	0	0	0	0	0	142	55	63
	20:00	0	0	0	3	9	38	35	7	3	0	0	0	0	0	0	95	55	62
	21:00	0	0	0	2	6	25	20	6	1	1	0	0	0	0	0	61	55	63
	22:00	0	0	0	0	7	18	26	7	0	0	0	0	0	0	0	58	56	63
	23:00	0	0	0	0	4	8	8	1	0	0	0	0	0	0	0	21	54	61
	Total	4	11	15	67	317	1173	1189	356	35	8	2	0	0	0	0	3177		
	Percent	0.1%	0.3%	0.5%	2.1%	10.0%	36.9%	37.4%	11.2%	1.1%	0.3%	0.1%	0.0%	0.0%	0.0%	0.0%			
	AM Peak	08:00	08:00	10:00	09:00	09:00	11:00	06:00	07:00	06:00	05:00	05:00							
	Vol.	3	4	3	9	26	67	81	37	4	2	1							
	PM Peak	17:00	15:00	15:00	16:00	16:00	15:00	17:00	17:00	14:00	13:00	15:00							
	Vol.	1	2	2	10	34	106	101	35	4	1	1							

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Date Start: 06-May-21  
 Date End: 12-May-21  
 Date Start: 06-May-21

NB	Start Time	1	16	24	32	40	48	56	64	72	80	89	97	105	113	121	Total	Average (Mean)	85th Percent
05/07/2																			
	1	0	0	0	1	1	4	6	2	0	0	0	0	0	0	0	14	56	61
	01:00	0	0	0	0	1	2	0	0	0	0	0	0	0	0	0	3	48	49
	02:00	0	0	1	0	0	6	1	2	0	0	0	0	0	0	0	10	52	63
	03:00	0	0	0	0	0	1	6	3	0	0	0	0	0	0	0	10	60	64
	04:00	0	0	0	0	3	10	14	8	2	0	0	0	0	0	0	37	59	67
	05:00	0	0	0	0	3	19	38	15	7	0	0	0	0	0	0	82	60	68
	06:00	0	0	2	2	9	60	61	22	2	2	0	0	0	0	0	160	57	64
	07:00	0	1	2	7	10	54	75	25	4	0	0	0	0	0	0	178	56	64
	08:00	0	0	1	5	19	61	54	16	1	0	0	0	0	0	0	157	54	62
	09:00	0	0	0	1	23	61	39	14	0	0	0	0	0	0	0	138	54	62
	10:00	0	1	0	9	34	80	60	12	2	0	0	0	0	0	0	198	53	61
	11:00	0	0	2	7	24	68	66	11	2	0	0	0	0	0	0	180	54	62
	12 PM	0	1	2	2	21	66	77	18	4	1	1	0	0	0	0	193	56	63
	13:00	2	1	1	4	17	87	64	8	1	0	0	0	0	0	0	185	53	61
	14:00	1	1	0	6	10	82	77	14	1	1	0	0	0	0	0	193	55	62
	15:00	0	1	1	10	25	91	109	33	3	2	0	0	0	0	0	275	56	63
	16:00	0	0	3	10	40	114	95	20	1	0	1	0	0	0	0	284	54	62
	17:00	0	0	1	1	28	88	103	38	3	1	0	0	0	0	0	263	56	64
	18:00	0	0	0	0	16	76	80	52	3	0	0	0	0	0	0	227	58	66
	19:00	0	0	1	4	14	56	50	9	0	0	0	0	0	0	0	134	54	62
	20:00	0	0	0	5	12	34	23	7	2	0	0	0	0	0	0	83	53	62
	21:00	0	0	1	1	6	20	18	6	1	1	0	0	0	0	0	54	55	63
	22:00	0	0	0	2	11	21	18	6	0	0	0	0	0	0	0	58	53	62
	23:00	0	0	0	0	1	14	7	2	0	0	0	0	0	0	0	24	54	60
	Total	3	6	18	77	328	1175	1141	343	39	8	2	0	0	0	0	3140		
	Percent	0.1%	0.2%	0.6%	2.5%	10.4%	37.4%	36.3%	10.9%	1.2%	0.3%	0.1%	0.0%	0.0%	0.0%	0.0%			
	AM Peak Vol.		07:00	06:00	10:00	10:00	10:00	07:00	07:00	05:00	06:00								
	PM Peak Vol.	13:00	12:00	16:00	15:00	16:00	16:00	15:00	18:00	12:00	15:00	12:00							

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 Date Start: 06-May-21

NB	Start Time	1	16	24	32	40	48	56	64	72	80	89	97	105	113	121	Total	Average (Mean)	85th Percent
05/08/2																			
	1	0	0	1	0	4	0	12	0	0	0	0	0	0	0	0	17	53	60
	01:00	1	0	3	0	3	7	0	0	0	0	0	0	0	0	0	14	41	52
	02:00	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	2	64	65
	03:00	0	0	0	0	0	0	2	1	1	0	0	0	0	0	0	4	64	71
	04:00	0	0	0	0	0	1	2	2	0	0	0	0	0	0	0	5	62	64
	05:00	0	0	0	0	0	3	4	1	1	0	0	0	0	0	0	9	59	71
	06:00	1	1	0	1	0	14	17	9	0	0	0	0	0	0	0	43	56	65
	07:00	0	1	0	1	5	25	33	15	1	0	0	0	0	0	0	81	57	65
	08:00	0	0	0	5	19	50	30	13	1	0	0	0	0	0	0	118	53	62
	09:00	0	0	0	11	32	80	48	26	1	0	0	0	0	0	0	198	53	63
	10:00	0	1	0	8	25	71	84	13	0	1	0	0	0	0	0	203	54	62
	11:00	0	0	1	2	23	78	70	14	3	1	0	0	0	0	0	192	55	62
	12 PM	0	0	1	3	44	67	64	21	2	1	0	0	0	0	0	203	54	63
	13:00	0	1	1	2	29	75	65	20	1	0	0	0	0	0	0	194	54	62
	14:00	0	1	2	5	19	70	70	20	2	1	1	0	0	0	0	191	55	63
	15:00	1	1	2	5	22	77	69	19	2	1	1	0	0	0	0	200	54	63
	16:00	0	0	0	4	25	79	84	23	2	0	0	0	0	0	0	217	55	63
	17:00	1	0	0	0	26	72	80	35	2	0	1	0	0	0	0	217	56	64
	18:00	0	0	0	0	9	64	61	27	3	0	1	0	0	0	0	165	57	65
	19:00	0	0	2	6	10	58	53	3	2	0	0	0	0	0	0	134	54	61
	20:00	0	0	0	0	7	42	49	3	2	1	1	0	0	0	0	105	56	62
	21:00	0	0	0	2	7	34	22	16	3	1	0	0	0	0	0	85	57	67
	22:00	0	0	0	1	9	21	30	3	0	0	0	0	0	0	0	64	55	61
	23:00	1	0	0	0	1	32	15	1	0	0	0	0	0	0	0	50	53	59
	Total	5	6	13	56	319	1020	964	287	29	7	5	0	0	0	0	2711		
	Percent	0.2%	0.2%	0.5%	2.1%	11.8%	37.6%	35.6%	10.6%	1.1%	0.3%	0.2%	0.0%	0.0%	0.0%	0.0%			
	AM Peak	01:00	06:00	01:00	09:00	09:00	09:00	10:00	09:00	11:00	10:00								
	Vol.	1	1	3	11	32	80	84	26	3	1								
	PM Peak	15:00	13:00	14:00	19:00	12:00	16:00	16:00	17:00	18:00	12:00	14:00							
	Vol.	1	1	2	6	44	79	84	35	3	1	1							

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NB	Start Time	1	16	24	32	40	48	56	64	72	80	89	97	105	113	121	Total	Average (Mean)	85th Percent	
05/09/2																				
	1	0	0	0	0	6	0	2	0	0	0	0	0	0	0	0	8	46	56	
	01:00	0	0	0	1	1	0	3	0	0	0	1	0	0	0	0	6	56	58	
	02:00	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	3	49	50	
	03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*	
	04:00	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	2	56	64	
	05:00	0	1	0	0	0	0	0	0	0	0	1	0	0	0	0	2	52	89	
	06:00	0	0	0	0	1	2	4	1	0	0	0	0	0	0	0	8	56	59	
	07:00	0	0	0	0	1	6	9	5	0	0	0	0	0	0	0	21	58	65	
	08:00	<b>3</b>	<b>3</b>	<b>1</b>	<b>2</b>	<b>10</b>	<b>37</b>	<b>43</b>	<b>8</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>107</b>	<b>53</b>	<b>62</b>	
	09:00	0	0	0	<b>7</b>	<b>20</b>	<b>54</b>	<b>33</b>	<b>17</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>131</b>	<b>54</b>	<b>63</b>	
	10:00	0	0	0	5	21	56	60	9	2	1	0	0	0	0	0	154	54	62	
	11:00	0	0	0	2	<b>25</b>	<b>86</b>	<b>68</b>	<b>17</b>	<b>3</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>201</b>	<b>55</b>	<b>62</b>	
	12 PM	1	1	1	3	<b>27</b>	<b>77</b>	<b>74</b>	<b>23</b>	<b>3</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>210</b>	<b>55</b>	<b>63</b>	
	13:00	0	<b>2</b>	0	4	21	92	82	14	1	<b>1</b>	<b>1</b>	0	0	0	0	218	55	62	
	14:00	0	0	1	<b>9</b>	8	<b>105</b>	87	17	3	0	0	0	0	0	0	230	55	62	
	15:00	0	1	1	5	9	76	<b>90</b>	23	2	1	0	0	0	0	0	208	56	63	
	16:00	0	1	1	6	26	68	76	16	1	0	0	0	0	0	0	195	54	62	
	17:00	<b>2</b>	1	0	0	20	53	60	<b>27</b>	1	1	0	0	0	0	0	165	56	64	
	18:00	1	0	1	1	7	47	44	18	2	0	0	0	0	0	0	121	56	64	
	19:00	0	0	0	3	11	37	26	14	2	0	0	0	0	0	0	93	55	64	
	20:00	0	1	0	1	2	20	17	2	1	0	0	0	0	0	0	44	54	61	
	21:00	0	0	0	1	5	15	10	5	0	0	0	0	0	0	0	36	54	63	
	22:00	0	0	0	0	2	7	13	2	0	0	0	0	0	0	0	24	56	61	
	23:00	0	0	0	0	3	9	8	0	0	0	0	0	0	0	0	20	54	60	
	Total	7	11	6	50	226	851	809	219	21	4	3	0	0	0	0	2207			
	Percent	0.3%	0.5%	0.3%	2.3%	10.2%	38.6%	36.7%	9.9%	1.0%	0.2%	0.1%	0.0%	0.0%	0.0%	0.0%				
	AM Peak	08:00	08:00	08:00	09:00	11:00	11:00	11:00	09:00	11:00	10:00	01:00								
	Vol.	3	3	1	7	25	86	68	17	3	1	1								
	PM Peak	17:00	13:00	12:00	14:00	12:00	14:00	15:00	17:00	12:00	13:00	13:00								
	Vol.	2	2	1	9	27	105	90	27	3	1	1								



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05/10/2																				
	1	0	0	0	0	5	2	0	0	0	0	0	0	0	0	0	7	44	48	
	01:00	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0	2	56	80	
	02:00	0	0	0	0	1	1	1	0	0	0	0	0	0	0	0	3	53	56	
	03:00	0	1	0	1	4	1	2	1	0	0	0	0	0	0	0	10	45	56	
	04:00	0	0	1	0	2	9	15	6	0	0	0	0	0	0	0	33	57	64	
	05:00	0	0	0	3	6	27	35	21	2	3	0	0	0	0	0	97	58	67	
	06:00	0	2	0	1	8	60	63	38	6	2	0	0	0	0	0	180	58	67	
	07:00	4	1	0	2	10	59	71	30	2	0	0	0	0	0	0	179	56	65	
	08:00	4	2	1	4	24	83	59	24	0	0	0	0	0	0	0	201	53	63	
	09:00	0	1	0	7	25	63	53	23	3	0	0	0	0	0	0	175	54	63	
	10:00	0	0	3	1	20	69	54	5	0	0	0	0	0	0	0	152	53	61	
	11:00	0	0	2	2	20	78	56	9	2	0	0	0	0	0	0	169	54	61	
	12 PM	0	0	1	4	24	67	70	21	3	0	0	0	0	0	0	190	55	63	
	13:00	0	0	0	4	8	90	69	19	1	4	0	0	0	0	0	195	56	63	
	14:00	0	2	1	6	13	88	84	17	4	0	1	0	0	0	0	216	55	62	
	15:00	1	3	2	8	35	98	85	19	3	0	0	0	0	0	0	254	53	62	
	16:00	0	2	2	14	45	127	95	21	1	0	0	0	0	0	0	307	53	61	
	17:00	2	1	1	0	39	89	104	45	3	1	0	0	0	0	0	285	56	64	
	18:00	1	0	2	0	17	106	90	22	1	0	0	0	0	0	0	239	55	62	
	19:00	0	0	2	3	12	47	43	14	2	0	0	0	0	0	0	123	55	63	
	20:00	0	0	0	3	8	37	32	10	4	0	1	0	0	0	0	95	56	64	
	21:00	0	0	0	2	5	23	19	4	1	1	0	0	0	0	0	55	55	62	
	22:00	0	0	0	0	5	12	22	5	0	0	0	0	0	0	0	44	56	62	
	23:00	0	1	0	0	7	12	13	0	0	0	0	0	0	0	0	33	52	59	
	Total	12	16	18	66	343	1248	1135	354	38	12	2	0	0	0	0	3244			
	Percent	0.4%	0.5%	0.6%	2.0%	10.6%	38.5%	35.0%	10.9%	1.2%	0.4%	0.1%	0.0%	0.0%	0.0%	0.0%				
	AM Peak	07:00	06:00	10:00	09:00	09:00	08:00	07:00	06:00	06:00	05:00									
	Vol.	4	2	3	7	25	83	71	38	6	3									
	PM Peak	17:00	15:00	15:00	16:00	16:00	16:00	17:00	17:00	14:00	13:00	14:00								
	Vol.	2	3	2	14	45	127	104	45	4	4	1								

**Ontario Traffic, Inc.**  
 17705 Leslie St., Unit 6  
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 Tel: (905) 898-7711 Fax: (905) 898-3664

Site Code: 148  
 Station ID: U239/U59  
 Simcoe Rd between Line 6 & Catania Ave

Date Start: 06-May-21  
 Date End: 12-May-21  
 Date Start: 06-May-21

NB	Start Time	1	16	24	32	40	48	56	64	72	80	89	97	105	113	121	Total	Average (Mean)	85th Percent
05/11/2																			
	1	0	0	1	0	1	2	4	0	0	0	0	0	0	0	0	8	51	58
	01:00	0	0	0	0	0	2	4	0	0	0	0	0	0	0	0	6	56	58
	02:00	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	2	40	48
	03:00	0	0	0	0	0	3	3	5	0	0	0	0	0	0	0	11	62	66
	04:00	0	0	0	2	2	7	8	6	1	1	1	0	0	0	0	28	59	68
	05:00	0	1	1	1	3	34	35	15	3	2	1	0	0	0	0	96	58	67
	06:00	0	0	0	1	10	61	74	37	4	2	1	0	0	0	0	190	58	66
	07:00	0	0	0	2	10	65	<b>93</b>	<b>48</b>	0	0	0	0	0	0	0	218	58	66
	08:00	0	<b>4</b>	1	6	19	<b>66</b>	66	25	0	0	1	0	0	0	0	188	55	63
	09:00	0	2	<b>2</b>	<b>8</b>	18	53	55	12	0	0	0	0	0	0	0	150	53	62
	10:00	0	1	2	2	18	59	59	7	0	0	0	0	0	0	0	148	54	61
	11:00	0	1	1	2	<b>27</b>	64	51	8	2	1	0	0	0	0	0	157	54	61
	12 PM	0	0	2	3	22	57	66	29	<b>3</b>	0	0	0	0	0	0	182	56	65
	13:00	0	<b>2</b>	0	0	17	74	68	12	3	0	0	0	0	0	0	176	55	62
	14:00	0	2	<b>3</b>	6	16	87	89	20	2	0	0	0	0	0	0	225	55	62
	15:00	<b>1</b>	2	3	8	29	116	76	22	2	<b>1</b>	<b>2</b>	0	0	0	0	262	54	62
	16:00	0	0	3	<b>17</b>	<b>38</b>	<b>130</b>	75	24	3	0	0	0	0	0	0	290	53	62
	17:00	0	2	1	4	34	105	<b>115</b>	24	2	1	0	0	0	0	0	288	55	62
	18:00	1	0	0	0	23	80	78	<b>51</b>	2	0	0	0	0	0	0	235	57	66
	19:00	0	0	2	5	10	52	55	2	2	1	0	0	0	0	0	129	54	61
	20:00	0	0	0	4	10	40	29	9	3	0	0	0	0	0	0	95	55	63
	21:00	0	0	0	2	7	27	16	11	2	0	0	0	0	0	0	65	55	65
	22:00	0	0	0	1	5	19	15	5	0	0	0	0	0	0	0	45	55	62
	23:00	0	0	0	0	1	9	5	0	0	1	0	0	0	0	0	16	55	59
	Total	2	17	22	75	320	1213	1139	372	34	10	6	0	0	0	0	3210		
	Percent	0.1%	0.5%	0.7%	2.3%	10.0%	37.8%	35.5%	11.6%	1.1%	0.3%	0.2%	0.0%	0.0%	0.0%	0.0%			
	AM Peak		08:00	09:00	09:00	11:00	08:00	07:00	07:00	06:00	05:00	04:00							
	Vol.		4	2	8	27	66	93	48	4	2	1							
	PM Peak	15:00	13:00	14:00	16:00	16:00	16:00	17:00	18:00	12:00	15:00	15:00							
	Vol.	1	2	3	17	38	130	115	51	3	1	2							

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Site Code: 148  
 Station ID: U239/U59  
 Simcoe Rd between Line 6 & Catania Ave

Date Start: 06-May-21  
 Date End: 12-May-21  
 Date Start: 06-May-21

NB	Start Time	1	16	24	32	40	48	56	64	72	80	89	97	105	113	121	Total	Average (Mean)	85th Percent	
05/12/2																				
	1	0	0	1	0	2	0	2	0	0	0	0	0	0	0	0	5	44	56	
	01:00	0	0	0	0	0	2	2	0	0	0	0	0	0	0	0	4	56	56	
	02:00	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	3	37	56	
	03:00	0	0	0	0	1	3	3	0	0	0	0	0	0	0	0	7	54	57	
	04:00	0	0	1	0	0	22	13	0	0	0	0	0	0	0	0	36	53	59	
	05:00	0	0	0	0	4	29	37	18	2	0	0	0	0	0	0	90	58	65	
	06:00	1	0	0	1	10	51	85	33	4	0	0	0	0	0	0	185	58	65	
	07:00	0	0	0	2	11	58	81	38	0	0	0	0	0	0	0	190	58	65	
	08:00	0	4	2	6	23	58	72	19	1	1	0	0	0	0	0	186	54	63	
	09:00	1	0	0	11	33	59	49	14	3	0	0	0	0	0	0	170	53	62	
	10:00	0	0	3	12	27	60	42	10	1	0	0	0	0	0	0	155	52	61	
	11:00	0	1	1	1	19	88	63	11	1	0	0	0	0	0	0	185	54	61	
	12 PM	0	0	3	1	20	67	64	17	1	1	0	0	0	0	0	174	55	63	
	13:00	0	0	0	5	15	81	72	16	2	0	0	0	0	0	0	191	55	62	
	14:00	0	0	0	5	23	87	85	26	4	0	0	0	0	0	0	230	55	63	
	15:00	0	0	0	15	35	95	103	35	1	1	0	0	0	0	0	285	55	63	
	16:00	0	0	0	2	23	120	119	21	3	2	0	0	0	0	0	290	56	62	
	17:00	0	1	1	4	16	80	98	35	9	0	0	0	0	0	0	244	57	65	
	18:00	0	1	1	2	13	67	75	19	2	0	0	0	0	0	0	180	56	63	
	19:00	0	1	0	2	15	53	39	13	3	1	0	0	0	0	0	127	55	63	
	20:00	0	0	0	2	6	45	26	6	1	0	1	0	0	0	0	87	55	62	
	21:00	0	1	1	1	5	21	15	5	0	0	0	0	0	0	0	49	53	62	
	22:00	0	0	0	2	8	20	19	4	1	1	0	0	0	0	0	55	54	62	
	23:00	0	0	0	0	3	6	6	2	1	1	0	0	0	0	0	19	57	64	
	Total	3	9	14	74	312	1173	1171	342	40	8	1	0	0	0	0	3147			
	Percent	0.1%	0.3%	0.4%	2.4%	9.9%	37.3%	37.2%	10.9%	1.3%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%				
	AM Peak	02:00	08:00	10:00	10:00	09:00	11:00	06:00	07:00	06:00	08:00									
	Vol.	1	4	3	12	33	88	85	38	4	1									
	PM Peak		17:00	12:00	15:00	15:00	16:00	16:00	15:00	17:00	16:00	20:00								
	Vol.		1	3	15	35	120	119	35	9	2	1								
	Total	36	76	106	465	2165	7853	7548	2273	236	57	21	0	0	0	0	20836			

15th Percentile : 48 KPH  
 50th Percentile : 55 KPH  
 85th Percentile : 63 KPH  
 95th Percentile : 69 KPH

Stats 10 KPH Pace Speed : 48-57 KPH  
 Number in Pace : 9741  
 Percent in Pace : 46.8%  
 Number of Vehicles > 40 KPH : 19883  
 Percent of Vehicles > 40 KPH : 95.4%  
 Mean Speed(Average) : 55 KPH

**Ontario Traffic, Inc.**  
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Site Code: 148  
 Station ID: U239/U59  
 Simcoe Rd between Line 6 & Catania Ave

Date Start: 06-May-21  
 Date End: 12-May-21  
 Date Start: 06-May-21

SB	Start Time	1	16	24	32	40	48	56	64	72	80	89	97	105	113	121	Total	Average (Mean)	85th Percent
05/06/2																			
	1	0	0	0	2	7	6	4	0	0	0	0	0	0	0	0	19	48	56
	01:00	0	0	0	2	4	4	1	0	0	0	0	0	0	0	0	11	47	50
	02:00	0	0	1	2	0	2	2	0	0	0	0	0	0	0	0	7	45	56
	03:00	0	0	0	0	2	0	3	0	0	0	0	0	0	0	0	5	50	57
	04:00	0	0	0	2	2	3	4	0	0	0	0	0	0	0	0	11	51	57
	05:00	0	0	0	7	5	22	14	5	0	0	0	0	0	0	0	53	52	61
	06:00	0	1	4	8	13	46	37	10	0	0	0	0	0	0	0	119	52	61
	07:00	0	1	5	<b>16</b>	17	35	39	10	<b>4</b>	0	0	0	0	0	0	127	52	62
	08:00	0	1	<b>10</b>	14	<b>22</b>	<b>61</b>	<b>60</b>	10	3	0	0	0	0	0	0	181	52	61
	09:00	0	<b>3</b>	2	13	15	58	40	5	0	0	0	0	0	0	0	136	51	60
	10:00	0	1	1	7	10	61	29	6	1	0	0	0	0	0	0	116	52	60
	11:00	0	1	5	6	19	54	37	<b>13</b>	1	0	0	0	0	0	0	136	52	62
	12 PM	0	2	6	3	15	50	61	17	1	<b>1</b>	<b>1</b>	0	0	0	0	157	55	63
	13:00	0	1	4	8	17	42	62	<b>25</b>	<b>3</b>	0	0	0	0	0	0	162	55	64
	14:00	0	0	7	13	17	58	73	21	1	0	0	0	0	0	0	190	54	63
	15:00	<b>1</b>	<b>6</b>	13	17	32	77	<b>94</b>	21	3	0	0	0	0	0	0	264	52	62
	16:00	0	5	<b>15</b>	<b>20</b>	42	90	88	23	2	1	1	<b>1</b>	0	0	0	288	52	62
	17:00	0	3	9	15	38	105	88	20	0	1	1	0	0	0	0	280	52	62
	18:00	0	0	5	18	<b>94</b>	<b>119</b>	45	6	0	0	0	0	0	0	0	287	49	57
	19:00	0	1	3	7	60	86	38	3	1	0	0	0	0	0	0	199	50	58
	20:00	0	0	3	7	47	69	28	5	0	0	0	0	0	0	0	159	50	58
	21:00	1	4	2	15	56	38	11	0	0	0	0	0	0	0	0	127	45	53
	22:00	0	0	4	19	23	41	14	0	0	1	0	1	0	0	0	103	48	56
	23:00	0	2	1	7	21	19	8	0	0	1	0	0	0	0	0	59	47	55
	Total	2	32	100	228	578	1146	880	200	20	5	3	2	0	0	0	3196		
	Percent	0.1%	1.0%	3.1%	7.1%	18.1%	35.9%	27.5%	6.3%	0.6%	0.2%	0.1%	0.1%	0.0%	0.0%	0.0%			
	AM Peak Vol.		09:00	08:00	07:00	08:00	08:00	08:00	11:00	07:00									
	PM Peak Vol.	15:00	15:00	16:00	16:00	18:00	18:00	15:00	13:00	13:00	12:00	12:00	16:00						

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Site Code: 148  
 Station ID: U239/U59  
 Simcoe Rd between Line 6 & Catania Ave

Date Start: 06-May-21  
 Date End: 12-May-21  
 Date Start: 06-May-21

SB

Start Time	1	16	24	32	40	48	56	64	72	80	89	97	105	113	121	Total	Average (Mean)	85th Percent
05/07/2																		
1	0	0	0	2	6	8	5	1	0	0	0	0	0	0	0	22	50	58
01:00	1	1	1	5	3	3	1	1	0	0	3	0	0	0	0	19	48	64
02:00	1	1	1	1	1	2	0	1	0	0	1	0	0	0	0	9	45	64
03:00	0	0	1	2	0	1	0	0	0	3	0	0	0	0	0	7	55	81
04:00	0	0	0	1	0	3	0	3	0	2	0	0	0	0	0	9	59	80
05:00	0	1	1	3	4	13	10	3	1	0	0	0	0	0	0	36	52	62
06:00	1	2	2	2	7	24	36	9	3	0	0	1	0	0	0	87	55	63
07:00	0	1	8	6	16	29	46	10	2	1	1	0	0	0	0	120	53	63
08:00	1	3	16	27	44	56	41	7	1	1	0	0	0	0	0	197	47	59
09:00	1	1	8	15	27	53	26	8	2	1	0	1	1	0	0	144	50	60
10:00	0	1	3	5	7	56	19	9	0	0	0	0	0	0	0	100	52	60
11:00	1	0	4	7	16	46	38	10	1	1	0	0	0	0	0	124	53	62
12 PM	1	1	8	10	16	46	56	15	3	0	0	0	0	0	0	156	53	63
13:00	1	1	6	6	10	39	52	18	0	0	0	0	0	0	0	133	54	63
14:00	0	2	6	11	14	53	59	18	2	0	0	1	0	0	0	166	54	63
15:00	2	3	22	17	35	90	100	13	1	0	0	0	0	0	0	283	51	61
16:00	1	3	16	17	40	114	116	22	2	0	1	1	0	0	0	333	52	62
17:00	1	2	10	14	38	119	93	18	1	1	0	0	0	0	0	297	52	61
18:00	0	2	11	15	69	106	76	13	1	0	0	0	0	0	0	293	51	60
19:00	0	0	7	9	35	65	64	4	1	0	1	0	0	0	0	186	52	61
20:00	0	0	5	7	37	60	36	8	0	0	0	0	0	0	0	153	51	60
21:00	0	0	7	11	42	51	25	6	0	0	0	0	0	0	0	142	49	58
22:00	0	3	3	9	18	33	16	1	0	0	0	0	0	0	0	83	48	58
23:00	0	1	1	5	15	18	11	0	0	0	0	0	0	0	0	51	48	57
Total	12	29	147	207	500	1088	926	198	21	10	7	4	1	0	0	3150		
Percent	0.4%	0.9%	4.7%	6.6%	15.9%	34.5%	29.4%	6.3%	0.7%	0.3%	0.2%	0.1%	0.0%	0.0%	0.0%			
AM Peak	01:00	08:00	08:00	08:00	08:00	08:00	07:00	07:00	06:00	03:00	01:00	06:00	09:00					
Vol.	1	3	16	27	44	56	46	10	3	3	3	1	1					
PM Peak	15:00	15:00	15:00	15:00	18:00	17:00	16:00	16:00	12:00	17:00	16:00	14:00						
Vol.	2	3	22	17	69	119	116	22	3	1	1	1						

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Date Start: 06-May-21  
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SB	Start Time	1	16	24	32	40	48	56	64	72	80	89	97	105	113	121	Total	Average (Mean)	85th Percent
05/08/2																			
	1	0	1	0	0	6	7	5	0	0	0	0	0	0	0	0	19	49	57
	01:00	0	1	0	0	4	3	2	3	1	0	0	0	0	0	0	14	52	65
	02:00	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	3	37	40
	03:00	1	0	0	0	1	0	5	0	0	0	0	1	0	0	0	8	54	60
	04:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
	05:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
	06:00	0	0	0	1	0	3	4	2	0	0	0	1	0	0	0	11	59	64
	07:00	0	0	4	2	1	9	12	2	1	0	0	0	0	0	0	31	51	61
	08:00	1	0	9	7	16	32	26	5	1	0	1	0	0	0	0	98	50	61
	09:00	0	3	0	12	9	56	42	6	0	0	0	0	0	0	0	128	52	61
	10:00	0	0	5	6	8	55	22	8	0	0	0	0	0	0	0	104	52	60
	11:00	0	2	4	4	19	43	35	9	2	1	0	0	0	0	0	120	53	62
	12 PM	1	3	4	1	9	38	51	12	0	1	0	0	0	0	0	120	54	63
	13:00	0	2	6	2	8	59	60	10	2	0	0	1	0	0	0	150	54	62
	14:00	1	0	5	9	17	62	70	24	1	2	0	0	0	0	0	191	55	63
	15:00	1	6	15	19	28	62	69	18	1	0	0	0	0	0	0	219	50	62
	16:00	3	1	13	15	27	72	66	10	0	0	0	1	0	0	0	208	51	61
	17:00	0	4	6	11	27	83	59	13	1	0	1	0	1	0	0	206	52	61
	18:00	0	2	3	7	63	76	41	6	1	1	0	1	0	0	0	201	50	59
	19:00	0	0	8	8	36	70	43	7	0	1	0	0	0	0	0	173	51	60
	20:00	0	1	3	4	25	37	13	0	0	1	0	0	0	0	0	84	49	56
	21:00	0	0	5	13	34	26	10	0	0	0	0	1	0	0	0	89	46	55
	22:00	0	1	1	9	18	14	5	2	1	0	0	0	0	0	0	51	46	55
	23:00	0	0	0	6	19	11	8	1	0	0	1	0	0	0	0	46	48	58
	Total	8	27	92	137	376	818	648	138	12	7	4	6	1	0	0	2274		
	Percent	0.4%	1.2%	4.0%	6.0%	16.5%	36.0%	28.5%	6.1%	0.5%	0.3%	0.2%	0.3%	0.0%	0.0%	0.0%			
	AM Peak	03:00	09:00	08:00	09:00	11:00	09:00	09:00	11:00	11:00	11:00	08:00	03:00						
	Vol.	1	3	9	12	19	56	42	9	2	1	1	1						
	PM Peak	16:00	15:00	15:00	15:00	18:00	17:00	14:00	14:00	13:00	14:00	17:00	13:00	17:00					
	Vol.	3	6	15	19	63	83	70	24	2	2	1	1	1					

**Ontario Traffic, Inc.**  
 17705 Leslie St., Unit 6  
 Newmarket, Ontario L3Y 3E3  
 Tel: (905) 898-7711 Fax: (905) 898-3664

Site Code: 148  
 Station ID: U239/U59  
 Simcoe Rd between Line 6 & Catania Ave

Date Start: 06-May-21  
 Date End: 12-May-21  
 Date Start: 06-May-21

SB	Start Time	1	16	24	32	40	48	56	64	72	80	89	97	105	113	121	Total	Average (Mean)	85th Percent
05/09/2																			
	1	1	1	0	0	6	7	3	1	1	0	1	0	0	0	0	21	50	58
	01:00	0	2	1	1	2	6	2	2	0	0	0	0	1	0	0	17	50	63
	02:00	0	0	0	0	1	2	1	0	0	0	0	1	0	0	0	5	59	56
	03:00	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	2	48	48
	04:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
	05:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
	06:00	0	0	0	0	0	3	3	0	0	1	0	0	0	0	0	7	59	58
	07:00	0	0	1	2	4	7	10	2	0	0	1	0	0	0	0	27	54	62
	08:00	0	0	4	5	10	16	13	2	1	0	0	0	0	0	0	51	50	59
	09:00	0	2	1	5	7	36	22	3	0	0	0	0	0	0	0	76	51	60
	10:00	0	1	2	4	8	35	20	6	0	0	0	0	0	0	0	76	52	61
	11:00	1	1	2	4	18	39	32	8	1	0	1	0	0	0	0	107	53	62
	12 PM	2	2	3	3	12	37	45	16	3	0	0	0	0	0	0	123	54	64
	13:00	1	3	5	1	6	43	52	13	0	0	0	0	0	0	0	124	54	62
	14:00	0	2	8	14	16	37	62	20	4	0	0	0	0	0	0	163	53	63
	15:00	1	3	13	12	26	65	61	18	1	0	0	0	0	0	0	200	51	62
	16:00	0	0	6	11	24	64	66	16	1	0	1	0	1	0	0	190	54	62
	17:00	0	0	6	12	25	70	58	13	2	1	1	0	0	0	0	188	53	62
	18:00	1	0	4	8	53	60	35	3	0	0	0	0	0	0	0	164	49	58
	19:00	0	0	2	5	36	53	25	1	0	0	0	0	0	0	0	122	50	58
	20:00	0	0	2	6	26	37	15	1	0	0	0	0	0	0	0	87	49	57
	21:00	0	0	1	7	25	19	4	0	0	0	1	0	0	0	0	57	47	53
	22:00	0	1	2	2	10	11	3	0	0	0	0	0	0	0	0	29	46	54
	23:00	0	0	1	1	6	8	2	0	0	0	0	1	0	0	0	19	50	55
	Total	7	18	64	103	322	656	534	125	14	2	6	2	2	0	0	1855		
	Percent	0.4%	1.0%	3.5%	5.6%	17.4%	35.4%	28.8%	6.7%	0.8%	0.1%	0.3%	0.1%	0.1%	0.0%	0.0%			
	AM Peak	00:00	01:00	08:00	08:00	11:00	11:00	11:00	11:00	00:00	06:00	00:00	02:00	01:00					
	Vol.	1	2	4	5	18	39	32	8	1	1	1	1	1					
	PM Peak	12:00	13:00	15:00	14:00	18:00	17:00	16:00	14:00	14:00	17:00	16:00	23:00	16:00					
	Vol.	2	3	13	14	53	70	66	20	4	1	1	1	1					

**Ontario Traffic, Inc.**  
 17705 Leslie St., Unit 6  
 Newmarket, Ontario L3Y 3E3  
 Tel: (905) 898-7711 Fax: (905) 898-3664

Site Code: 148  
 Station ID: U239/U59  
 Simcoe Rd between Line 6 & Catania Ave

Date Start: 06-May-21  
 Date End: 12-May-21  
 Date Start: 06-May-21

SB	Start Time	1	16	24	32	40	48	56	64	72	80	89	97	105	113	121	Total	Average (Mean)	85th Percent
05/10/2																			
	1	0	0	0	3	3	8	5	0	0	0	0	0	0	0	0	19	50	57
	01:00	0	0	1	0	4	4	2	0	0	1	0	0	0	0	0	12	50	56
	02:00	0	0	0	1	0	3	1	0	0	1	0	0	0	0	0	6	52	56
	03:00	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	24	24
	04:00	0	1	0	0	0	4	1	0	1	0	0	0	0	0	0	7	49	56
	05:00	0	1	1	1	7	11	10	1	9	0	0	0	0	0	0	41	56	73
	06:00	0	1	3	6	13	25	43	11	5	1	0	0	0	0	0	108	55	64
	07:00	0	1	2	8	25	36	45	7	4	0	0	0	0	0	0	128	53	62
	08:00	0	1	13	22	48	62	46	10	4	0	0	0	0	0	0	206	49	60
	09:00	2	0	8	13	27	62	24	8	2	0	1	0	0	0	0	147	49	60
	10:00	1	1	0	8	12	55	38	7	0	0	0	0	0	0	0	122	52	61
	11:00	0	0	3	4	13	43	50	11	1	1	0	0	0	0	0	127	55	63
	12 PM	0	0	5	4	11	39	50	15	3	0	1	0	0	0	0	128	55	63
	13:00	0	2	6	4	10	52	62	12	1	0	0	0	0	0	0	149	54	62
	14:00	0	1	3	9	13	53	73	22	2	1	0	1	0	0	0	178	56	63
	15:00	0	5	19	23	42	70	79	20	2	0	0	0	1	0	0	261	51	62
	16:00	0	2	11	15	40	95	81	31	2	1	1	1	0	0	0	280	53	63
	17:00	0	2	13	18	33	108	104	22	1	0	0	0	0	0	0	301	52	62
	18:00	0	1	14	18	74	118	78	12	1	0	0	0	0	0	0	316	50	60
	19:00	0	3	6	9	61	73	39	3	2	0	0	0	0	0	0	196	49	58
	20:00	0	1	3	8	43	59	26	2	0	1	1	0	0	0	0	144	50	57
	21:00	0	2	2	14	53	34	7	0	0	1	0	0	0	0	0	113	46	53
	22:00	1	0	3	11	35	33	3	1	0	0	0	0	0	0	0	87	45	53
	23:00	0	1	0	5	20	15	8	0	0	0	0	0	0	0	0	49	47	56
	Total	4	26	117	204	587	1062	875	195	40	8	5	2	1	0	0	3126		
	Percent	0.1%	0.8%	3.7%	6.5%	18.8%	34.0%	28.0%	6.2%	1.3%	0.3%	0.2%	0.1%	0.0%	0.0%	0.0%			
	AM Peak	09:00	04:00	08:00	08:00	08:00	08:00	11:00	06:00	05:00	01:00	09:00							
	Vol.	2	1	13	22	48	62	50	11	9	1	1							
	PM Peak	22:00	15:00	15:00	15:00	18:00	18:00	17:00	16:00	12:00	14:00	12:00	14:00	15:00					
	Vol.	1	5	19	23	74	118	104	31	3	1	1	1	1					



**Ontario Traffic, Inc.**  
 17705 Leslie St., Unit 6  
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 Tel: (905) 898-7711 Fax: (905) 898-3664

Site Code: 148  
 Station ID: U239/U59  
 Simcoe Rd between Line 6 & Catania Ave

Date Start: 06-May-21  
 Date End: 12-May-21  
 Date Start: 06-May-21

SB

Start Time	1	16	24	32	40	48	56	64	72	80	89	97	105	113	121	Total	Average (Mean)	85th Percent
05/11/2																		
1	0	0	1	1	7	6	3	0	0	0	0	0	0	0	0	18	47	53
01:00	0	0	0	3	3	6	6	0	0	0	0	0	0	0	0	18	51	58
02:00	0	0	0	0	2	0	1	1	2	1	0	0	0	0	0	7	63	73
03:00	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	3	49	50
04:00	0	1	0	1	2	2	3	0	0	0	0	0	0	0	0	9	48	57
05:00	1	1	3	2	7	11	8	2	4	1	0	3	0	0	0	43	54	73
06:00	1	0	2	4	17	24	46	11	2	0	1	0	0	0	0	108	55	63
07:00	0	2	6	8	23	30	58	18	1	1	0	0	0	0	0	147	54	63
08:00	1	0	13	23	45	57	41	8	2	0	1	0	0	0	0	191	49	60
09:00	0	4	10	17	30	45	33	5	2	1	1	0	0	0	0	148	49	60
10:00	1	2	2	6	9	59	28	6	0	0	2	1	0	0	0	116	53	61
11:00	0	1	2	9	17	44	28	7	0	0	0	1	0	0	0	109	52	61
12 PM	1	2	7	6	12	35	50	16	1	0	0	0	0	0	0	130	53	63
13:00	0	1	4	5	9	50	56	17	0	0	0	0	0	0	0	142	55	63
14:00	0	3	9	12	18	47	57	13	2	0	0	0	0	0	0	161	52	62
15:00	0	7	21	20	32	65	78	19	2	0	0	0	0	0	0	244	50	62
16:00	1	1	11	12	37	112	104	28	1	1	1	0	0	0	0	309	53	62
17:00	0	3	11	14	35	122	108	30	2	1	2	0	0	0	0	328	53	62
18:00	0	1	13	12	57	113	86	9	2	0	0	0	0	0	0	293	51	60
19:00	0	1	7	10	35	71	58	6	1	1	0	0	0	0	0	190	51	60
20:00	0	1	3	6	34	48	37	7	0	0	0	0	0	0	0	136	51	60
21:00	1	1	3	10	35	44	26	6	0	0	0	0	0	0	0	126	49	59
22:00	0	0	3	10	16	38	23	2	1	0	1	0	1	0	0	95	51	60
23:00	0	0	1	6	17	14	13	1	0	0	0	1	0	0	0	53	50	59
Total	7	32	132	197	499	1046	951	212	25	7	9	6	1	0	0	3124		
Percent	0.2%	1.0%	4.2%	6.3%	16.0%	33.5%	30.4%	6.8%	0.8%	0.2%	0.3%	0.2%	0.0%	0.0%	0.0%			
AM Peak	05:00	09:00	08:00	08:00	08:00	10:00	07:00	07:00	05:00	02:00	10:00	05:00						
Vol.	1	4	13	23	45	59	58	18	4	1	2	3						
PM Peak	12:00	15:00	15:00	15:00	18:00	17:00	17:00	17:00	14:00	16:00	17:00	23:00	22:00					
Vol.	1	7	21	20	57	122	108	30	2	1	2	1	1					

**Ontario Traffic, Inc.**  
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 Newmarket, Ontario L3Y 3E3  
 Tel: (905) 898-7711 Fax: (905) 898-3664

Site Code: 148  
 Station ID: U239/U59  
 Simcoe Rd between Line 6 & Catania Ave

Date Start: 06-May-21  
 Date End: 12-May-21  
 Date Start: 06-May-21

SB

Start Time	1	16	24	32	40	48	56	64	72	80	89	97	105	113	121	Total	Average (Mean)	85th Percent	
05/12/2																			
1	1	0	0	3	5	3	5	1	0	0	0	0	0	0	0	18	47	58	
01:00	0	0	0	0	4	4	1	1	0	0	1	1	0	0	0	12	58	64	
02:00	1	1	0	2	0	0	0	0	0	0	1	0	0	0	0	5	37	33	
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*	
04:00	2	1	0	1	0	0	0	1	3	0	2	0	0	0	0	10	52	74	
05:00	2	2	2	3	3	9	7	4	1	6	2	3	2	0	0	46	61	85	
06:00	1	3	5	4	26	15	37	9	0	3	0	3	0	0	0	106	53	63	
07:00	0	0	7	10	25	32	41	8	4	1	0	0	0	0	0	128	52	62	
08:00	1	2	16	24	40	51	41	11	2	0	1	0	0	0	0	189	48	61	
09:00	0	3	4	16	20	56	39	6	1	1	0	0	0	0	0	146	51	60	
10:00	0	1	2	6	12	55	28	6	1	0	0	0	0	0	0	111	52	60	
11:00	0	0	2	6	20	40	39	9	2	1	0	0	0	0	0	119	53	62	
12 PM	0	0	3	3	12	48	52	14	4	0	0	0	0	0	0	136	55	63	
13:00	0	0	7	10	11	41	45	18	1	1	0	0	0	0	0	134	54	63	
14:00	0	0	7	6	12	57	72	20	2	1	0	1	0	0	0	178	55	63	
15:00	1	2	13	15	30	68	89	28	5	0	0	0	1	0	0	252	53	63	
16:00	0	4	9	9	21	103	123	37	6	0	0	0	0	0	0	312	55	63	
17:00	0	2	9	27	66	133	74	14	0	0	1	0	0	0	0	326	50	60	
18:00	0	1	7	19	77	112	36	6	0	0	0	0	0	0	0	258	49	56	
19:00	0	2	6	6	39	80	38	4	0	0	0	1	0	0	0	176	50	59	
20:00	0	3	4	13	66	59	19	1	1	0	0	0	0	0	0	166	47	55	
21:00	0	1	2	11	41	35	9	0	0	0	0	1	0	0	0	100	47	54	
22:00	0	0	1	11	28	25	5	1	0	0	0	0	0	0	0	71	46	54	
23:00	1	0	0	5	17	9	7	1	0	0	1	0	0	0	0	41	48	58	
Total	10	28	106	210	575	1035	807	200	33	14	9	10	3	0	0	3040			
Percent	0.3%	0.9%	3.5%	6.9%	18.9%	34.0%	26.5%	6.6%	1.1%	0.5%	0.3%	0.3%	0.1%	0.0%	0.0%				
AM Peak	04:00	06:00	08:00	08:00	08:00	09:00	07:00	08:00	07:00	05:00	04:00	05:00	05:00						
Vol.	2	3	16	24	40	56	41	11	4	6	2	3	2						
PM Peak	15:00	16:00	15:00	17:00	18:00	17:00	16:00	16:00	16:00	13:00	17:00	14:00	15:00						
Vol.	1	4	13	27	77	133	123	37	6	1	1	1	1						
Total	50	192	758	1286	3437	6851	5621	1268	165	53	43	32	9	0	0	19765			

15th Percentile : 41 KPH  
 50th Percentile : 52 KPH  
 85th Percentile : 62 KPH  
 95th Percentile : 67 KPH

Stats  
 10 KPH Pace Speed : 48-57 KPH  
 Number in Pace : 8257  
 Percent in Pace : 41.8%  
 Number of Vehicles > 40 KPH : 17050  
 Percent of Vehicles > 40 KPH : 86.3%  
 Mean Speed(Average) : 52 KPH

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Site Code: 148  
 Station ID: U239/U59  
 Simcoe Rd between Line 6 & Catania Ave

Date Start: 06-May-21  
 Date End: 12-May-21  
 Date Start: 06-May-21

NB, SB	1	16	24	32	40	48	56	64	72	80	89	97	105	113	121	Total	Average (Mean)	85th Percent
Start Time	15	23	31	39	47	55	63	71	79	88	96	104	112	120	9999			
05/06/2																		
1	0	0	2	2	11	7	6	0	0	0	0	0	0	0	0	28	47	57
01:00	0	0	1	2	4	7	5	0	0	0	0	0	0	0	0	19	49	57
02:00	0	0	1	2	0	4	4	0	0	0	0	0	0	0	0	11	49	57
03:00	0	1	0	0	3	3	7	1	0	0	0	0	0	0	0	15	53	61
04:00	0	0	1	3	3	13	20	6	0	0	0	0	0	0	0	46	55	63
05:00	0	1	0	9	11	55	51	25	2	2	1	0	0	0	0	157	56	65
06:00	0	1	4	10	18	101	118	39	4	1	0	0	0	0	0	296	56	63
07:00	0	1	5	17	26	87	115	47	6	0	0	0	0	0	0	304	55	65
08:00	3	5	11	19	40	124	122	29	3	0	0	0	0	0	0	356	52	62
09:00	0	3	2	22	41	111	84	20	2	0	0	0	0	0	0	285	52	61
10:00	0	1	4	11	29	122	87	11	1	0	0	0	0	0	0	266	53	61
11:00	0	1	6	8	39	121	98	25	4	1	0	0	0	0	0	303	54	62
12 PM	0	2	6	9	42	117	133	41	3	1	1	0	0	0	0	355	55	63
13:00	0	2	4	9	38	117	127	41	4	1	0	0	0	0	0	343	55	63
14:00	0	1	8	21	29	153	168	40	5	0	0	0	0	0	0	425	55	63
15:00	1	8	15	23	55	183	183	48	7	1	1	0	0	0	0	525	53	62
16:00	0	5	16	30	76	189	185	48	3	1	1	1	0	0	0	555	53	62
17:00	1	4	10	16	71	195	189	55	2	2	1	0	0	0	0	546	54	63
18:00	0	0	5	18	111	210	132	35	3	0	0	0	0	0	0	514	52	61
19:00	0	1	4	11	75	144	85	19	2	0	0	0	0	0	0	341	52	60
20:00	0	0	3	10	56	107	63	12	3	0	0	0	0	0	0	254	52	60
21:00	1	4	2	17	62	63	31	6	1	1	0	0	0	0	0	188	48	58
22:00	0	0	4	19	30	59	40	7	0	1	0	1	0	0	0	161	51	60
23:00	0	2	1	7	25	27	16	1	0	1	0	0	0	0	0	80	49	58
Total	6	43	115	295	895	2319	2069	556	55	13	5	2	0	0	0	6373		
Percent	0.1%	0.7%	1.8%	4.6%	14.0%	36.4%	32.5%	8.7%	0.9%	0.2%	0.1%	0.0%	0.0%	0.0%	0.0%			
AM Peak	08:00	08:00	08:00	09:00	09:00	08:00	08:00	07:00	07:00	05:00	05:00							
Vol.	3	5	11	22	41	124	122	47	6	2	1							
PM Peak	15:00	15:00	16:00	16:00	18:00	18:00	17:00	17:00	15:00	17:00	12:00	16:00						
Vol.	1	8	16	30	111	210	189	55	7	2	1	1						

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 17705 Leslie St., Unit 6  
 Newmarket, Ontario L3Y 3E3  
 Tel: (905) 898-7711 Fax: (905) 898-3664

Site Code: 148  
 Station ID: U239/U59  
 Simcoe Rd between Line 6 & Catania Ave

Date Start: 06-May-21  
 Date End: 12-May-21  
 Date Start: 06-May-21

NB, SB	1	16	24	32	40	48	56	64	72	80	89	97	105	113	121	Total	Average (Mean)	85th Percent
Start Time	15	23	31	39	47	55	63	71	79	88	96	104	112	120	9999			
05/07/2																		
1	0	0	0	3	7	12	11	3	0	0	0	0	0	0	0	36	52	61
01:00	1	1	1	5	4	5	1	1	0	0	3	0	0	0	0	22	49	64
02:00	1	1	2	1	1	8	1	3	0	0	1	0	0	0	0	19	49	64
03:00	0	0	1	2	0	2	6	3	0	3	0	0	0	0	0	17	58	66
04:00	0	0	0	1	3	13	14	11	2	2	0	0	0	0	0	46	59	68
05:00	0	1	1	3	7	32	48	18	8	0	0	0	0	0	0	118	58	66
06:00	1	2	4	4	16	84	97	31	5	2	0	1	0	0	0	247	56	64
07:00	0	2	10	13	26	83	121	35	6	1	1	0	0	0	0	298	55	63
08:00	1	3	17	32	63	117	95	23	2	1	0	0	0	0	0	354	50	61
09:00	1	1	8	16	50	114	65	22	2	1	0	1	1	0	0	282	52	62
10:00	0	2	3	14	41	136	79	21	2	0	0	0	0	0	0	298	53	61
11:00	1	0	6	14	40	114	104	21	3	1	0	0	0	0	0	304	53	62
12 PM	1	2	10	12	37	112	133	33	7	1	1	0	0	0	0	349	54	63
13:00	3	2	7	10	27	126	116	26	1	0	0	0	0	0	0	318	53	62
14:00	1	3	6	17	24	135	136	32	3	1	0	1	0	0	0	359	54	62
15:00	2	4	23	27	60	181	209	46	4	2	0	0	0	0	0	558	53	62
16:00	1	3	19	27	80	228	211	42	3	0	2	1	0	0	0	617	53	62
17:00	1	2	11	15	66	207	196	56	4	2	0	0	0	0	0	560	54	63
18:00	0	2	11	15	85	182	156	65	4	0	0	0	0	0	0	520	54	63
19:00	0	0	8	13	49	121	114	13	1	0	1	0	0	0	0	320	53	61
20:00	0	0	5	12	49	94	59	15	2	0	0	0	0	0	0	236	52	61
21:00	0	0	8	12	48	71	43	12	1	1	0	0	0	0	0	196	51	60
22:00	0	3	3	11	29	54	34	7	0	0	0	0	0	0	0	141	50	60
23:00	0	1	1	5	16	32	18	2	0	0	0	0	0	0	0	75	50	59
Total	15	35	165	284	828	2263	2067	541	60	18	9	4	1	0	0	6290		
Percent	0.2%	0.6%	2.6%	4.5%	13.2%	36.0%	32.9%	8.6%	1.0%	0.3%	0.1%	0.1%	0.0%	0.0%	0.0%			
AM Peak	01:00	08:00	08:00	08:00	08:00	10:00	07:00	07:00	05:00	03:00	01:00	06:00	09:00					
Vol.	1	3	17	32	63	136	121	35	8	3	3	1	1					
PM Peak	13:00	15:00	15:00	15:00	18:00	16:00	16:00	18:00	12:00	15:00	16:00	14:00						
Vol.	3	4	23	27	85	228	211	65	7	2	2	1						

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Site Code: 148  
 Station ID: U239/U59  
 Simcoe Rd between Line 6 & Catania Ave

Date Start: 06-May-21  
 Date End: 12-May-21  
 Date Start: 06-May-21

NB, SB	1	16	24	32	40	48	56	64	72	80	89	97	105	113	121	Total	Average (Mean)	85th Percent
Start Time	15	23	31	39	47	55	63	71	79	88	96	104	112	120	9999			
05/08/2																		
1	0	1	1	0	10	7	17	0	0	0	0	0	0	0	0	36	51	61
01:00	1	1	3	0	7	10	2	3	1	0	0	0	0	0	0	28	47	63
02:00	0	0	1	1	1	0	0	2	0	0	0	0	0	0	0	5	48	64
03:00	1	0	0	0	1	0	7	1	1	0	0	1	0	0	0	12	58	71
04:00	0	0	0	0	0	1	2	2	0	0	0	0	0	0	0	5	62	64
05:00	0	0	0	0	0	3	4	1	1	0	0	0	0	0	0	9	59	71
06:00	1	1	0	2	0	17	21	11	0	0	0	1	0	0	0	54	56	65
07:00	0	1	4	3	6	34	45	17	2	0	0	0	0	0	0	112	56	64
08:00	1	0	9	12	35	82	56	18	2	0	1	0	0	0	0	216	52	62
09:00	0	3	0	23	41	136	90	32	1	0	0	0	0	0	0	326	53	62
10:00	0	1	5	14	33	126	106	21	0	1	0	0	0	0	0	307	53	62
11:00	0	2	5	6	42	121	105	23	5	2	1	0	0	0	0	312	54	62
12 PM	1	3	5	4	53	105	115	33	2	2	0	0	0	0	0	323	54	63
13:00	0	3	7	4	37	134	125	30	3	0	0	1	0	0	0	344	54	62
14:00	1	1	7	14	36	132	140	44	3	3	1	0	0	0	0	382	55	63
15:00	2	7	17	24	50	139	138	37	3	1	1	0	0	0	0	419	52	62
16:00	3	1	13	19	52	151	150	33	2	0	0	1	0	0	0	425	53	62
17:00	1	4	6	11	53	155	139	48	3	0	2	0	1	0	0	423	54	63
18:00	0	2	3	7	72	140	102	33	4	1	1	1	0	0	0	366	54	62
19:00	0	0	10	14	46	128	96	10	2	1	0	0	0	0	0	307	52	61
20:00	0	1	3	4	32	79	62	3	2	2	1	0	0	0	0	189	53	61
21:00	0	0	5	15	41	60	32	16	3	1	0	1	0	0	0	174	51	62
22:00	0	1	1	10	27	35	35	5	1	0	0	0	0	0	0	115	51	61
23:00	1	0	0	6	20	43	23	2	0	0	1	0	0	0	0	96	51	59
Total	13	33	105	193	695	1838	1612	425	41	14	9	6	1	0	0	4985		
Percent	0.3%	0.7%	2.1%	3.9%	13.9%	36.9%	32.3%	8.5%	0.8%	0.3%	0.2%	0.1%	0.0%	0.0%	0.0%			
AM Peak Vol.	1	3	9	23	42	136	106	32	5	2	1	1						
PM Peak Vol.	3	7	17	24	72	155	150	48	4	3	2	1	1					

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Site Code: 148  
 Station ID: U239/U59  
 Simcoe Rd between Line 6 & Catania Ave

Date Start: 06-May-21  
 Date End: 12-May-21  
 Date Start: 06-May-21

NB, SB	1	16	24	32	40	48	56	64	72	80	89	97	105	113	121	Total	Average (Mean)	85th Percent
Start Time	15	23	31	39	47	55	63	71	79	88	96	104	112	120	9999			
05/09/2																		
1	1	1	0	0	12	7	5	1	1	0	1	0	0	0	0	29	49	59
01:00	0	2	1	2	3	6	5	2	0	0	1	0	1	0	0	23	52	64
02:00	0	0	0	0	1	5	1	0	0	0	0	1	0	0	0	8	56	56
03:00	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	2	48	48
04:00	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	2	56	64
05:00	0	1	0	0	0	0	0	0	0	0	1	0	0	0	0	2	52	89
06:00	0	0	0	0	1	5	7	1	0	1	0	0	0	0	0	15	58	62
07:00	0	0	1	2	5	13	19	7	0	0	1	0	0	0	0	48	56	64
08:00	<b>3</b>	<b>3</b>	<b>5</b>	7	20	53	56	10	1	0	0	0	0	0	0	158	52	62
09:00	0	2	1	<b>12</b>	27	90	55	20	0	0	0	0	0	0	0	207	53	62
10:00	0	1	2	9	29	91	80	15	2	1	0	0	0	0	0	230	54	62
11:00	1	1	2	6	<b>43</b>	<b>125</b>	<b>100</b>	<b>25</b>	<b>4</b>	0	1	0	0	0	0	308	54	62
12 PM	<b>3</b>	3	4	6	39	114	119	39	6	0	0	0	0	0	0	333	55	63
13:00	1	<b>5</b>	5	5	27	135	134	27	1	1	<b>1</b>	0	0	0	0	342	54	62
14:00	0	2	9	<b>23</b>	24	<b>142</b>	149	37	<b>7</b>	0	0	0	0	0	0	393	54	63
15:00	1	4	<b>14</b>	17	35	141	<b>151</b>	<b>41</b>	3	1	0	0	0	0	0	408	54	63
16:00	0	1	7	17	50	132	142	32	2	0	1	0	<b>1</b>	0	0	385	54	62
17:00	2	1	6	12	45	123	118	40	3	<b>2</b>	1	0	0	0	0	353	54	63
18:00	2	0	5	9	<b>60</b>	107	79	21	2	0	0	0	0	0	0	285	52	61
19:00	0	0	2	8	47	90	51	15	2	0	0	0	0	0	0	215	52	61
20:00	0	1	2	7	28	57	32	3	1	0	0	0	0	0	0	131	51	59
21:00	0	0	1	8	30	34	14	5	0	0	1	0	0	0	0	93	50	58
22:00	0	1	2	2	12	18	16	2	0	0	0	0	0	0	0	53	51	60
23:00	0	0	1	1	9	17	10	0	0	0	0	<b>1</b>	0	0	0	39	52	58
Total	14	29	70	153	548	1507	1343	344	35	6	9	2	2	0	0	4062		
Percent	0.3%	0.7%	1.7%	3.8%	13.5%	37.1%	33.1%	8.5%	0.9%	0.1%	0.2%	0.0%	0.0%	0.0%	0.0%			
AM Peak	08:00	08:00	08:00	09:00	11:00	11:00	11:00	11:00	11:00	06:00	00:00	02:00	01:00					
Vol.	3	3	5	12	43	125	100	25	4	1	1	1	1					
PM Peak	12:00	13:00	15:00	14:00	18:00	14:00	15:00	15:00	14:00	17:00	13:00	23:00	16:00					
Vol.	3	5	14	23	60	142	151	41	7	2	1	1	1					

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Site Code: 148  
 Station ID: U239/U59  
 Simcoe Rd between Line 6 & Catania Ave

Date Start: 06-May-21  
 Date End: 12-May-21  
 Date Start: 06-May-21

NB, SB	1	16	24	32	40	48	56	64	72	80	89	97	105	113	121	Total	Average (Mean)	85th Percent
Start Time	15	23	31	39	47	55	63	71	79	88	96	104	112	120	9999			
05/10/2																		
1	0	0	0	3	8	10	5	0	0	0	0	0	0	0	0	26	48	56
01:00	0	0	1	1	4	4	2	0	0	2	0	0	0	0	0	14	52	57
02:00	0	0	0	1	1	4	2	0	0	1	0	0	0	0	0	9	53	57
03:00	0	1	1	1	4	1	2	1	0	0	0	0	0	0	0	11	45	56
04:00	0	1	1	0	2	13	16	6	1	0	0	0	0	0	0	40	56	64
05:00	0	1	1	4	13	38	45	22	11	3	0	0	0	0	0	138	58	68
06:00	0	3	3	7	21	85	106	49	11	3	0	0	0	0	0	288	57	67
07:00	4	2	2	10	35	95	116	37	6	0	0	0	0	0	0	307	55	63
08:00	4	3	14	26	72	145	105	34	4	0	0	0	0	0	0	407	51	62
09:00	2	1	8	20	52	125	77	31	5	0	1	0	0	0	0	322	52	62
10:00	1	1	3	9	32	124	92	12	0	0	0	0	0	0	0	274	53	61
11:00	0	0	5	6	33	121	106	20	3	1	1	0	0	0	0	296	54	62
12 PM	0	0	6	8	35	106	120	36	6	0	1	0	0	0	0	318	55	63
13:00	0	2	6	8	18	142	131	31	2	4	0	0	0	0	0	344	55	63
14:00	0	3	4	15	26	141	157	39	6	1	1	1	0	0	0	394	55	63
15:00	1	8	21	31	77	168	164	39	5	0	0	0	1	0	0	515	52	62
16:00	0	4	13	29	85	222	176	52	3	1	1	1	0	0	0	587	53	62
17:00	2	3	14	18	72	197	208	67	4	1	0	0	0	0	0	586	54	63
18:00	1	1	16	18	91	224	168	34	2	0	0	0	0	0	0	555	52	61
19:00	0	3	8	12	73	120	82	17	4	0	0	0	0	0	0	319	51	61
20:00	0	1	3	11	51	96	58	12	4	1	2	0	0	0	0	239	52	61
21:00	0	2	2	16	58	57	26	4	1	2	0	0	0	0	0	168	49	57
22:00	1	0	3	11	40	45	25	6	0	0	0	0	0	0	0	131	49	59
23:00	0	2	0	5	27	27	21	0	0	0	0	0	0	0	0	82	49	58
Total	16	42	135	270	930	2310	2010	549	78	20	7	2	1	0	0	6370		
Percent	0.3%	0.7%	2.1%	4.2%	14.6%	36.3%	31.6%	8.6%	1.2%	0.3%	0.1%	0.0%	0.0%	0.0%	0.0%			
AM Peak	07:00	06:00	08:00	08:00	08:00	08:00	07:00	06:00	05:00	05:00	09:00							
Vol.	4	3	14	26	72	145	116	49	11	3	1							
PM Peak	17:00	15:00	15:00	15:00	18:00	18:00	17:00	17:00	12:00	13:00	20:00	14:00	15:00					
Vol.	2	8	21	31	91	224	208	67	6	4	2	1	1					

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Site Code: 148  
 Station ID: U239/U59  
 Simcoe Rd between Line 6 & Catania Ave

Date Start: 06-May-21  
 Date End: 12-May-21  
 Date Start: 06-May-21

NB, SB	1	16	24	32	40	48	56	64	72	80	89	97	105	113	121	Total	Average (Mean)	85th Percent
Start Time	15	23	31	39	47	55	63	71	79	88	96	104	112	120	9999			
05/11/2																		
1	0	0	2	1	8	8	7	0	0	0	0	0	0	0	0	26	48	58
01:00	0	0	0	3	3	8	10	0	0	0	0	0	0	0	0	24	52	59
02:00	0	0	0	1	2	1	1	1	2	1	0	0	0	0	0	9	59	73
03:00	0	0	0	0	0	6	3	5	0	0	0	0	0	0	0	14	58	66
04:00	0	1	0	3	4	9	11	6	1	1	1	0	0	0	0	37	56	66
05:00	1	2	4	3	10	45	43	17	7	3	1	3	0	0	0	139	57	68
06:00	1	0	2	5	27	85	120	48	6	2	2	0	0	0	0	298	57	66
07:00	0	2	6	10	33	95	151	66	1	1	0	0	0	0	0	365	56	65
08:00	1	4	14	29	64	123	107	33	2	0	2	0	0	0	0	379	52	62
09:00	0	6	12	25	48	98	88	17	2	1	1	0	0	0	0	298	51	61
10:00	1	3	4	8	27	118	87	13	0	0	2	1	0	0	0	264	53	61
11:00	0	2	3	11	44	108	79	15	2	1	0	1	0	0	0	266	53	61
12 PM	1	2	9	9	34	92	116	45	4	0	0	0	0	0	0	312	55	64
13:00	0	3	4	5	26	124	124	29	3	0	0	0	0	0	0	318	55	62
14:00	0	5	12	18	34	134	146	33	4	0	0	0	0	0	0	386	54	62
15:00	1	9	24	28	61	181	154	41	4	1	2	0	0	0	0	506	52	62
16:00	1	1	14	29	75	242	179	52	4	1	1	0	0	0	0	599	53	62
17:00	0	5	12	18	69	227	223	54	4	2	2	0	0	0	0	616	54	62
18:00	1	1	13	12	80	193	164	60	4	0	0	0	0	0	0	528	54	63
19:00	0	1	9	15	45	123	113	8	3	2	0	0	0	0	0	319	52	61
20:00	0	1	3	10	44	88	66	16	3	0	0	0	0	0	0	231	53	61
21:00	1	1	3	12	42	71	42	17	2	0	0	0	0	0	0	191	51	61
22:00	0	0	3	11	21	57	38	7	1	0	1	0	1	0	0	140	52	61
23:00	0	0	1	6	18	23	18	1	0	1	0	1	0	0	0	69	51	60
Total	9	49	154	272	819	2259	2090	584	59	17	15	6	1	0	0	6334		
Percent	0.1%	0.8%	2.4%	4.3%	12.9%	35.7%	33.0%	9.2%	0.9%	0.3%	0.2%	0.1%	0.0%	0.0%	0.0%			
AM Peak	05:00	09:00	08:00	08:00	08:00	08:00	07:00	07:00	05:00	05:00	06:00	05:00						
Vol.	1	6	14	29	64	123	151	66	7	3	2	3						
PM Peak	12:00	15:00	15:00	16:00	18:00	16:00	17:00	18:00	12:00	17:00	15:00	23:00	22:00					
Vol.	1	9	24	29	80	242	223	60	4	2	2	1	1					



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 Station ID: U239/U59  
 Simcoe Rd between Line 6 & Catania Ave

Date Start: 06-May-21  
 Date End: 12-May-21  
 Date Start: 06-May-21

NB, SB	1	16	24	32	40	48	56	64	72	80	89	97	105	113	121	Total	Average (Mean)	85th Percent
Start Time	15	23	31	39	47	55	63	71	79	88	96	104	112	120	9999			
05/12/2																		
1	1	0	1	3	7	3	7	1	0	0	0	0	0	0	0	23	47	60
01:00	0	0	0	0	4	6	3	1	0	0	1	1	0	0	0	16	57	64
02:00	2	1	0	2	0	1	1	0	0	0	1	0	0	0	0	8	36	56
03:00	0	0	0	0	1	3	3	0	0	0	0	0	0	0	0	7	54	57
04:00	2	1	1	1	0	22	13	1	3	0	2	0	0	0	0	46	53	62
05:00	2	2	2	3	7	38	44	22	3	6	2	3	2	0	0	136	59	69
06:00	2	3	5	5	36	66	122	42	4	3	0	3	0	0	0	291	56	65
07:00	0	0	7	12	36	90	122	46	4	1	0	0	0	0	0	318	55	64
08:00	1	6	18	30	63	109	113	30	3	1	1	0	0	0	0	375	51	62
09:00	1	3	4	27	53	115	88	20	4	1	0	0	0	0	0	316	52	61
10:00	0	1	5	18	39	115	70	16	2	0	0	0	0	0	0	266	52	61
11:00	0	1	3	7	39	128	102	20	3	1	0	0	0	0	0	304	54	62
12 PM	0	0	6	4	32	115	116	31	5	1	0	0	0	0	0	310	55	63
13:00	0	0	7	15	26	122	117	34	3	1	0	0	0	0	0	325	54	63
14:00	0	0	7	11	35	144	157	46	6	1	0	1	0	0	0	408	55	63
15:00	1	2	13	30	65	163	192	63	6	1	0	0	1	0	0	537	54	63
16:00	0	4	9	11	44	223	242	58	9	2	0	0	0	0	0	602	55	63
17:00	0	3	10	31	82	213	172	49	9	0	1	0	0	0	0	570	53	62
18:00	0	2	8	21	90	179	111	25	2	0	0	0	0	0	0	438	52	61
19:00	0	3	6	8	54	133	77	17	3	1	0	1	0	0	0	303	52	61
20:00	0	3	4	15	72	104	45	7	2	0	1	0	0	0	0	253	50	58
21:00	0	2	3	12	46	56	24	5	0	0	0	1	0	0	0	149	49	58
22:00	0	0	1	13	36	45	24	5	1	1	0	0	0	0	0	126	50	59
23:00	1	0	0	5	20	15	13	3	1	1	1	0	0	0	0	60	51	60
Total	13	37	120	284	887	2208	1978	542	73	22	10	10	3	0	0	6187		
Percent	0.2%	0.6%	1.9%	4.6%	14.3%	35.7%	32.0%	8.8%	1.2%	0.4%	0.2%	0.2%	0.0%	0.0%	0.0%			
AM Peak	02:00	08:00	08:00	08:00	08:00	11:00	06:00	07:00	06:00	05:00	04:00	05:00	05:00					
Vol.	2	6	18	30	63	128	122	46	4	6	2	3	2					
PM Peak	15:00	16:00	15:00	17:00	18:00	16:00	16:00	15:00	16:00	16:00	17:00	14:00	15:00					
Vol.	1	4	13	31	90	223	242	63	9	2	1	1	1					
Total	86	268	864	1751	5602	14704	13169	3541	401	110	64	32	9	0	0	40601		

15th Percentile : 44 KPH  
 50th Percentile : 54 KPH  
 85th Percentile : 62 KPH  
 95th Percentile : 68 KPH

Stats  
 10 KPH Pace Speed : 48-57 KPH  
 Number in Pace : 17997  
 Percent in Pace : 44.3%  
 Number of Vehicles > 40 KPH : 36932  
 Percent of Vehicles > 40 KPH : 91.0%  
 Mean Speed(Average) : 53 KPH

# **APPENDIX B**

## **ENVIRONMENTAL NOISE GUIDELINES**

**APPENDIX B**  
**ENVIRONMENTAL NOISE GUIDELINES**  
**MINISTRY OF THE ENVIRONMENT, CONSERVATION AND PARKS (MECP)**

Reference: MECP Publication NPC-300, October 2013: “*Environmental Noise Guideline, Stationary and Transportation Source – Approval and Planning*”.

SPACE	SOURCE	TIME PERIOD	CRITERION
Living/dining, den areas of residences, hospitals, nursing homes, schools, daycare centres, etc.	Road	07:00 to 23:00	45 dBA
	Rail	07:00 to 23:00	40 dBA
	Aircraft	24-hour period	NEF/NEP 5
Living/dining, den areas of residences, hospitals, nursing homes, etc. (except schools or daycare centres)	Road	23:00 to 07:00	45 dBA
	Rail	23:00 to 07:00	40 dBA
	Aircraft	24-hour period	NEF/NEP 5
Sleeping quarters	Road	07:00 to 23:00	45 dBA
	Rail	07:00 to 23:00	40 dBA
	Aircraft	24-hour period	NEF/NEP 0
Sleeping quarters	Road	23:00 to 07:00	40 dBA
	Rail	23:00 to 07:00	35 dBA
	Aircraft	24-hour period	NEF/NEP 0
Outdoor Living Areas	Road and Rail	07:00 to 23:00	55 dBA
Outdoor Point of Reception	Aircraft	24-hour period	NEF/NEP 30 <sup>#</sup>
	Stationary Source		
	Class 1 Area	07:00 to 19:00 <sup>(1)</sup>	50 <sup>+</sup> dBA
		19:00 to 23:00 <sup>(1)</sup>	50 <sup>+</sup> dBA
	Class 2 Area	07:00 to 19:00 <sup>(2)</sup>	50 <sup>+</sup> dBA
		19:00 to 23:00 <sup>(2)</sup>	45 <sup>+</sup> dBA
	Class 3 Area	07:00 to 19:00 <sup>(3)</sup>	45 <sup>+</sup> dBA
		19:00 to 23:00 <sup>(3)</sup>	40 <sup>+</sup> dBA
Class 4 Area	07:00 to 19:00 <sup>(4)</sup>	55 <sup>+</sup> dBA	
	19:00 to 23:00 <sup>(4)</sup>	55 <sup>+</sup> dBA	

..../cont'd

SPACE	SOURCE	TIME PERIOD	CRITERION
Plane of a Window of Noise Sensitive Spaces	Stationary Source Class 1 Area	07:00 to 19:00 <sup>(1)</sup>	50 <sup>+</sup> dBA
		19:00 to 23:00 <sup>(1)</sup>	50 <sup>+</sup> dBA
		23:00 to 07:00 <sup>(1)</sup>	45 <sup>+</sup> dBA
	Class 2 Area	07:00 to 19:00 <sup>(2)</sup>	50 <sup>+</sup> dBA
		19:00 to 23:00 <sup>(2)</sup>	50 <sup>+</sup> dBA
		23:00 to 07:00 <sup>(2)</sup>	45 <sup>+</sup> dBA
	Class 3 Area	07:00 to 19:00 <sup>(3)</sup>	45 <sup>+</sup> dBA
		19:00 to 23:00 <sup>(3)</sup>	45 <sup>+</sup> dBA
		23:00 to 07:00 <sup>(3)</sup>	40 <sup>+</sup> dBA
	Class 4 Area	07:00 to 19:00 <sup>(4)</sup>	60 <sup>+</sup> dBA
		19:00 to 23:00 <sup>(4)</sup>	60 <sup>+</sup> dBA
		23:00 to 07:00 <sup>(4)</sup>	55 <sup>+</sup> dBA

- # may not apply to in-fill or re-development.  
 \* or the minimum hourly background sound exposure  $L_{eq(1)}$ , due to road traffic, if higher.  
 (1) Class 1 Area: Urban.  
 (2) Class 2 Area: Urban during day; rural-like evening and night.  
 (3) Class 3 Area: Rural.  
 (4) Class 4 Area: Subject to land use planning authority's approval.

Reference: MECP Publication ISBN 0-7729-2804-5, 1987: "Environmental Noise Assessment in Land-Use Planning".

EXCESS ABOVE RECOMMENDED SOUND LEVEL LIMITS (dBA)	CHANGE IN SUBJECTIVE LOUDNESS ABOVE	MAGNITUDE OF THE NOISE PROBLEM	NOISE CONTROL MEASURES (OR ACTION TO BE TAKEN)
No excess (<55 dBA)	—	No expected noise problem	None
1 to 5 inclusive (56 to 60 dBA)	Noticeably louder	Slight noise impact	If no physical measures are taken, then prospective purchasers or tenants should be made aware by suitable warning clauses.
6 to 10 inclusive (61 - 65 dBA)	Almost twice as loud	Definite noise impact	Recommended.
11 to 15 inclusive (66 - 70 dBA)	Almost three times as loud	Serious noise impact	Strongly Recommended.
16 and over (>70 dBA)	Almost four times as loud	Very serious noise impact	Strongly Recommended (may be mandatory).

# **APPENDIX C**

## **SAMPLE CALCULATION**

### **TRANSPORTATION SOURCE ANALYSIS**

STAMSON 5.04                    NORMAL REPORT                    Date: 31-01-2022 16:53:35  
MINISTRY OF ENVIRONMENT, CONSERVATION AND PARKS / NOISE ASSESSMENT

Filename: sw\_sf.te                    Time Period: Day/Night 16/8 hours  
Description: **Southwest Corner - South Facade**

Road data, segment # 1: Simcoe (day/night)

-----  
Car traffic volume    : 6709/745    veh/TimePeriod    \*  
Medium truck volume : 212/24     veh/TimePeriod    \*  
Heavy truck volume  : 141/16     veh/TimePeriod    \*  
Posted speed limit  : 50 km/h  
Road gradient        : 0 %  
Road pavement       : 1 (Typical asphalt or concrete)

\* Refers to calculated road volumes based on the following input:

24 hr Traffic Volume (AADT or SADT): 6311  
Percentage of Annual Growth        : 2.00  
Number of Years of Growth         : 11.00  
Medium Truck % of Total Volume    : 3.00  
Heavy Truck % of Total Volume     : 2.00  
Day (16 hrs) % of Total Volume    : 90.00

Data for Segment # 1: Simcoe (day/night)

-----  
Angle1    Angle2                    : -90.00 deg    0.00 deg  
Wood depth                        : 0            (No woods.)  
No of house rows                  : 0 / 0  
Surface                            : 2            (Reflective ground surface)  
Receiver source distance         : 28.00 / 28.00 m  
Receiver height                   : 11.50 / 11.50 m  
Topography                        : 1            (Flat/gentle slope; no barrier)  
Reference angle                    : 0.00

Road data, segment # 2: Marshview (day/night)

-----  
Car traffic volume    : 6709/745    veh/TimePeriod    \*  
Medium truck volume : 212/24     veh/TimePeriod    \*  
Heavy truck volume  : 141/16     veh/TimePeriod    \*  
Posted speed limit  : 50 km/h  
Road gradient        : 0 %  
Road pavement       : 1 (Typical asphalt or concrete)

\* Refers to calculated road volumes based on the following input:

24 hr Traffic Volume (AADT or SADT): 6311  
Percentage of Annual Growth        : 2.00  
Number of Years of Growth         : 11.00  
Medium Truck % of Total Volume    : 3.00  
Heavy Truck % of Total Volume     : 2.00  
Day (16 hrs) % of Total Volume    : 90.00

Data for Segment # 2: Marshview (day/night)

-----  
Angle1 Angle2 : -90.00 deg 90.00 deg  
Wood depth : 0 (No woods.)  
No of house rows : 0 / 0  
Surface : 2 (Reflective ground surface)  
Receiver source distance : 22.00 / 22.00 m  
Receiver height : 11.50 / 11.50 m  
Topography : 1 (Flat/gentle slope; no barrier)  
Reference angle : 0.00

Results segment # 1: Simcoe (day)

-----  
Source height = 1.19 m

ROAD (0.00 + 57.04 + 0.00) = 57.04 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
-90	0	0.00	62.77	0.00	-2.71	-3.01	0.00	0.00	0.00	57.04

-----  
Segment Leq : 57.04 dBA

Results segment # 2: Marshview (day)

-----  
Source height = 1.19 m

ROAD (0.00 + 61.10 + 0.00) = 61.10 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
-90	90	0.00	62.77	0.00	-1.66	0.00	0.00	0.00	0.00	61.10

-----  
Segment Leq : 61.10 dBA

Total Leq All Segments: 62.54 dBA

Results segment # 1: Simcoe (night)

-----  
Source height = 1.19 m

ROAD (0.00 + 50.57 + 0.00) = 50.57 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
-90	0	0.00	56.29	0.00	-2.71	-3.01	0.00	0.00	0.00	50.57

-----  
Segment Leq : 50.57 dBA

Results segment # 2: Marshview (night)

-----  
Source height = 1.19 m

ROAD (0.00 + 54.63 + 0.00) = 54.63 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
-90	90	0.00	56.29	0.00	-1.66	0.00	0.00	0.00	0.00	54.63

-----

Segment Leq : 54.63 dBA

Total Leq All Segments: 56.07 dBA

TOTAL Leq FROM ALL SOURCES (DAY) : 62.54  
(NIGHT) : 56.07



# **APPENDIX D**

## **SAMPLE CALCULATION**

### **STATIONARY SOURCE ANALYSIS**

Point Sources

Name	M.	ID	Result. PWL			Lw / Li		Correction			Sound Reduction		Attenuation	Operating Time			K0	Freq.	Direct.	Height	Coordinates					
			Day (dBA)	Evening (dBA)	Night (dBA)	Type	Value	norm. dB(A)	Day dB(A)	Evening dB(A)	Night dB(A)	R		Area (m²)	Day (min)	Special (min)					Night (min)	X (m)	Y (m)	Z (m)		
		EP_curling_condenser	89.4	89.4	89.4	Lw	Curling_Condenser									0.0		(none)	1.20	g	17615074.43	4885250.32	5.20			
Rooftop Unit		EP_RTU_10T	88.3	88.3	88.3	Lw	LGH092_120									60.00	60.00	30.00	0.0		(none)	1.20	g	17615011.49	4885284.02	8.20
Rooftop Unit		EP_RTU_10T	88.3	88.3	88.3	Lw	LGH092_120									60.00	60.00	30.00	0.0		(none)	1.20	g	17615012.20	4885280.82	8.20
Rooftop Unit		EP_RTU_7T	88.3	88.3	88.3	Lw	LGH092_120									60.00	60.00	30.00	0.0		(none)	1.20	g	17615012.78	4885269.34	8.20
Rooftop unit		EP_RTU_5T	81.4	81.4	81.4	Lw	LGH060									60.00	60.00	30.00	0.0		(none)	1.20	g	17615035.24	4885268.68	4.20

Area Sources

Name	M.	ID	Result. PWL			Result. PWL"			Lw / Li		Correction			Sound Reduction		Attenuation	Operating Time			K0	Freq.	Direct.	Moving Pt. Src						
			Day (dBA)	Evening (dBA)	Night (dBA)	Day (dBA)	Evening (dBA)	Night (dBA)	Type	Value	norm. dB(A)	Day dB(A)	Evening dB(A)	Night dB(A)	R		Area (m²)	Day (min)	Special (min)				Night (min)	dB	Hz	Day	Evening	Night	
Daikin Chiller	~	PE_C_1_Unmit	93.9	93.9	93.9	84.4	84.4	84.4	Lw	Chiller											60.00	60.00	30.00	0.0		(none)			
Daikin Chiller	~	PE_C_2_Unmit	93.9	93.9	93.9	84.4	84.4	84.4	Lw	Chiller											60.00	60.00	30.00	0.0		(none)			
Daikin Chiller	~	PE_C_1_Mit	88.3	88.3	88.3	78.8	78.8	78.8	Lw	Chiller_SI											60.00	60.00	30.00	0.0		(none)			
Daikin Chiller	~	PE_C_2_Mit	88.3	88.3	88.3	78.8	78.8	78.8	Lw	Chiller_SI											60.00	60.00	30.00	0.0		(none)			
Daikin Energy Recovery Unit	~	PE_ERU	90.1	90.1	90.1	76.1	76.1	76.1	Lw	ERU											60.00	60.00	60.00	0.0		(none)			

Sound Level Library

Name	ID	Type	Weight	1/3 Oktave Spectrum (dB)																									
				25	31.5	40	50	63	80	100	125	160	200	250	315	400	500	630	800	1000	1250	1600	2000	2500	3150	4000	5000	6300	ε
Curling_Condenser	Curling_Condenser	Lw (c)		84.6	87.7	90.6	97.4	102.6	89.7	89.9	91.5	83.3	81.6	80.9	80.8	86.4	80.1	80.9	81.5	79.4	76.6	76.3	72.7	69.4	67.1	64.1	59.9	55.9	
Lennox LGH060	LGH060	Lw	A								67.0				72.0		77.0			76.0			73.0			68.0			
Lennox LGH092 and 120	LGH092_120	Lw	A								76.0				79.0		84.0			83.0			79.0			73.0			
Daikin Energy Recovery Unit	ERU	Lw									0.0				91.0		88.0			86.0			81.0			79.0			
Daikin AGZ101	Chiller	Lw									93.0				95.0		92.0			89.0			83.0			82.0			
Daikin AGZ101 With Sound Insulation	Chiller_SI	Lw									90.0				86.0		86.0			83.0			80.0			78.0			

Calculation Configuration

Configuration	
Parameter	Value
General	
Country	(user defined)
Max. Error (dB)	0.00
Max. Search Radius (#(Unit,LEN))	2000.00
Min. Dist Src to Rcvr	0.00
Partition	
Raster Factor	0.50
Max. Length of Section (#(Unit,LEN))	1000.00
Min. Length of Section (#(Unit,LEN))	1.00
Min. Length of Section (%)	0.00
Proj. Line Sources	On
Proj. Area Sources	On
Ref. Time	
Reference Time Day (min)	960.00
Reference Time Night (min)	480.00
Daytime Penalty (dB)	0.00
Recr. Time Penalty (dB)	6.00
Night-time Penalty (dB)	10.00
DTM	
Standard Height (m)	0.00
Model of Terrain	Triangulation
Reflection	
max. Order of Reflection	2

Configuration	
Parameter	Value
Search Radius Src	100.00
Search Radius Rcvr	100.00
Max. Distance Source - Rcvr	1000.00 1000.00
Min. Distance Rcvr - Reflector	1.00 1.00
Min. Distance Source - Reflector	0.10
Industrial (ISO 9613)	
Lateral Diffraction	some Obj
Obst. within Area Src do not shield	On
Screening	Excl. Ground Att. over Barrier
	Dz with limit (20/25)
Barrier Coefficients C1,2,3	3.0 20.0 0.0
Temperature #(Unit,TEMP)	10
rel. Humidity (%)	70
Ground Absorption G	0.00
Wind Speed for Dir. #(Unit,SPEED)	3.0
Roads (RLS-90)	
Strictly acc. to RLS-90	
Railways (Schall 03 (1990))	
Strictly acc. to Schall 03 / Schall-Transrapid	
Aircraft (???)	
Strictly acc. to AzB	

Receiver  
 Name: (untitled)  
 ID: EP\_OPOR  
 X: 17615023.37 m  
 Y: 4885151.64 m  
 Z: 1.50 m

Point Source, ISO 9613, Name: "", ID: "EP_curling_condenser"																				
Nr.	X (m)	Y (m)	Z (m)	Refl.	DEN	Freq. (Hz)	Lw dB(A)	l/a dB	Optime dB	K0 (dB)	Di (dB)	Adiv (dB)	Aatm (dB)	Agr (dB)	Afol (dB)	Ahous (dB)	Abar (dB)	Cmet (dB)	RL (dB)	Lr dB(A)
1	17615074.43	4885250.32	5.20	0	DEN	32	53.7	0.0	0.0	0.0	0.0	51.9	0.0	-3.0	0.0	0.0	0.0	0.0	0.0	4.7
1	17615074.43	4885250.32	5.20	0	DEN	63	77.7	0.0	0.0	0.0	0.0	51.9	0.0	-3.0	0.0	0.0	0.0	0.0	0.0	28.8
1	17615074.43	4885250.32	5.20	0	DEN	125	78.1	0.0	0.0	0.0	0.0	51.9	0.0	-2.4	0.0	0.0	0.0	0.0	0.0	28.5
1	17615074.43	4885250.32	5.20	0	DEN	250	77.3	0.0	0.0	0.0	0.0	51.9	0.1	-2.7	0.0	0.0	0.0	0.0	0.0	27.9
1	17615074.43	4885250.32	5.20	0	DEN	500	85.0	0.0	0.0	0.0	0.0	51.9	0.2	-2.8	0.0	0.0	0.0	0.0	0.0	35.7
1	17615074.43	4885250.32	5.20	0	DEN	1000	84.4	0.0	0.0	0.0	0.0	51.9	0.4	-2.8	0.0	0.0	0.0	0.0	0.0	34.8
1	17615074.43	4885250.32	5.20	0	DEN	2000	79.6	0.0	0.0	0.0	0.0	51.9	1.1	-2.8	0.0	0.0	0.0	0.0	0.0	29.4
1	17615074.43	4885250.32	5.20	0	DEN	4000	70.4	0.0	0.0	0.0	0.0	51.9	3.6	-2.8	0.0	0.0	0.0	0.0	0.0	17.6
1	17615074.43	4885250.32	5.20	0	DEN	8000	58.7	0.0	0.0	0.0	0.0	51.9	13.0	-2.8	0.0	0.0	0.0	0.0	0.0	-3.4
2	17615074.43	4885250.32	5.20	1	DEN	500	85.0	0.0	0.0	0.0	0.0	56.3	0.4	-2.8	0.0	0.0	0.0	0.0	2.0	29.1
2	17615074.43	4885250.32	5.20	1	DEN	1000	84.4	0.0	0.0	0.0	0.0	56.3	0.7	-2.8	0.0	0.0	0.0	0.0	2.0	28.2
2	17615074.43	4885250.32	5.20	1	DEN	2000	79.6	0.0	0.0	0.0	0.0	56.3	1.8	-2.8	0.0	0.0	0.0	0.0	2.0	22.3
2	17615074.43	4885250.32	5.20	1	DEN	4000	70.4	0.0	0.0	0.0	0.0	56.3	6.0	-2.8	0.0	0.0	0.0	0.0	2.0	8.8
2	17615074.43	4885250.32	5.20	1	DEN	8000	58.7	0.0	0.0	0.0	0.0	56.3	21.5	-2.8	0.0	0.0	0.0	0.0	2.0	-18.3
3	17615074.43	4885250.32	5.20	2	DEN	500	85.0	0.0	0.0	0.0	0.0	56.4	0.4	-2.7	0.0	0.0	0.0	0.0	4.0	26.9
3	17615074.43	4885250.32	5.20	2	DEN	1000	84.4	0.0	0.0	0.0	0.0	56.4	0.7	-2.7	0.0	0.0	0.0	0.0	4.0	26.0
3	17615074.43	4885250.32	5.20	2	DEN	2000	79.6	0.0	0.0	0.0	0.0	56.4	1.8	-2.7	0.0	0.0	0.0	0.0	4.0	20.1
3	17615074.43	4885250.32	5.20	2	DEN	4000	70.4	0.0	0.0	0.0	0.0	56.4	6.1	-2.7	0.0	0.0	0.0	0.0	4.0	6.6
3	17615074.43	4885250.32	5.20	2	DEN	8000	58.7	0.0	0.0	0.0	0.0	56.4	21.8	-2.7	0.0	0.0	0.0	0.0	4.0	-20.8
4	17615074.43	4885250.32	5.20	2	DEN	4000	70.4	0.0	0.0	0.0	0.0	56.4	6.1	-2.8	0.0	0.0	27.8	0.0	4.0	-21.2
4	17615074.43	4885250.32	5.20	2	DEN	8000	58.7	0.0	0.0	0.0	0.0	56.4	21.8	-2.8	0.0	0.0	27.8	0.0	4.0	-48.6
5	17615074.43	4885250.32	5.20	1	DEN	63	77.7	0.0	0.0	0.0	0.0	52.2	0.0	-3.0	0.0	0.0	0.0	0.0	2.0	26.5
5	17615074.43	4885250.32	5.20	1	DEN	125	78.1	0.0	0.0	0.0	0.0	52.2	0.0	-2.3	0.0	0.0	0.0	0.0	2.0	26.1
5	17615074.43	4885250.32	5.20	1	DEN	250	77.3	0.0	0.0	0.0	0.0	52.2	0.1	-2.7	0.0	0.0	0.0	0.0	2.0	25.6
5	17615074.43	4885250.32	5.20	1	DEN	500	85.0	0.0	0.0	0.0	0.0	52.2	0.2	-2.8	0.0	0.0	0.0	0.0	2.0	33.3
5	17615074.43	4885250.32	5.20	1	DEN	1000	84.4	0.0	0.0	0.0	0.0	52.2	0.4	-2.8	0.0	0.0	0.0	0.0	2.0	32.5
5	17615074.43	4885250.32	5.20	1	DEN	2000	79.6	0.0	0.0	0.0	0.0	52.2	1.1	-2.8	0.0	0.0	0.0	0.0	2.0	27.1
5	17615074.43	4885250.32	5.20	1	DEN	4000	70.4	0.0	0.0	0.0	0.0	52.2	3.8	-2.8	0.0	0.0	0.0	0.0	2.0	15.2
5	17615074.43	4885250.32	5.20	1	DEN	8000	58.7	0.0	0.0	0.0	0.0	52.2	13.4	-2.8	0.0	0.0	0.0	0.0	2.0	-6.2
6	17615074.43	4885250.32	5.20	1	DEN	250	77.3	0.0	0.0	0.0	0.0	55.4	0.2	-2.5	0.0	0.0	18.9	0.0	2.0	3.3
6	17615074.43	4885250.32	5.20	1	DEN	500	85.0	0.0	0.0	0.0	0.0	55.4	0.3	-2.7	0.0	0.0	21.9	0.0	2.0	8.0
6	17615074.43	4885250.32	5.20	1	DEN	1000	84.4	0.0	0.0	0.0	0.0	55.4	0.6	-2.7	0.0	0.0	24.9	0.0	2.0	4.1
6	17615074.43	4885250.32	5.20	1	DEN	2000	79.6	0.0	0.0	0.0	0.0	55.4	1.6	-2.7	0.0	0.0	27.7	0.0	2.0	-4.4
6	17615074.43	4885250.32	5.20	1	DEN	4000	70.4	0.0	0.0	0.0	0.0	55.4	5.4	-2.7	0.0	0.0	27.7	0.0	2.0	-17.5
6	17615074.43	4885250.32	5.20	1	DEN	8000	58.7	0.0	0.0	0.0	0.0	55.4	19.4	-2.7	0.0	0.0	27.7	0.0	2.0	-43.1

Point Source, ISO 9613, Name: "Rooftop Unit", ID: "EP_RTU_7T"																				
Nr.	X (m)	Y (m)	Z (m)	Refl.	DEN	Freq. (Hz)	Lw dB(A)	l/a dB	Optime dB	K0 (dB)	Di (dB)	Adiv (dB)	Aatm (dB)	Agr (dB)	Afol (dB)	Ahous (dB)	Abar (dB)	Cmet (dB)	RL (dB)	Lr dB(A)
7	17615012.78	4885269.34	8.20	0	D	125	76.0	0.0	0.0	0.0	0.0	52.5	0.0	-2.8	0.0	0.0	0.0	0.0	0.0	26.3
7	17615012.78	4885269.34	8.20	0	D	250	79.0	0.0	0.0	0.0	0.0	52.5	0.1	-2.8	0.0	0.0	0.0	0.0	0.0	29.3
7	17615012.78	4885269.34	8.20	0	D	500	84.0	0.0	0.0	0.0	0.0	52.5	0.2	-2.8	0.0	0.0	0.0	0.0	0.0	34.2
7	17615012.78	4885269.34	8.20	0	D	1000	83.0	0.0	0.0	0.0	0.0	52.5	0.4	-2.8	0.0	0.0	0.0	0.0	0.0	33.0
7	17615012.78	4885269.34	8.20	0	D	2000	79.0	0.0	0.0	0.0	0.0	52.5	1.1	-2.8	0.0	0.0	0.0	0.0	0.0	28.2
7	17615012.78	4885269.34	8.20	0	D	4000	73.0	0.0	0.0	0.0	0.0	52.5	3.9	-2.8	0.0	0.0	0.0	0.0	0.0	19.5
7	17615012.78	4885269.34	8.20	0	D	8000	66.0	0.0	0.0	0.0	0.0	52.5	13.8	-2.8	0.0	0.0	0.0	0.0	0.0	2.5
7	17615012.78	4885269.34	8.20	0	N	125	76.0	0.0	-3.0	0.0	0.0	52.5	0.0	-2.8	0.0	0.0	0.0	0.0	0.0	23.2
7	17615012.78	4885269.34	8.20	0	N	250	79.0	0.0	-3.0	0.0	0.0	52.5	0.1	-2.8	0.0	0.0	0.0	0.0	0.0	26.2
7	17615012.78	4885269.34	8.20	0	N	500	84.0	0.0	-3.0	0.0	0.0	52.5	0.2	-2.8	0.0	0.0	0.0	0.0	0.0	31.1
7	17615012.78	4885269.34	8.20	0	N	1000	83.0	0.0	-3.0	0.0	0.0	52.5	0.4	-2.8	0.0	0.0	0.0	0.0	0.0	29.9
7	17615012.78	4885269.34	8.20	0	N	2000	79.0	0.0	-3.0	0.0	0.0	52.5	1.1	-2.8	0.0	0.0	0.0	0.0	0.0	25.2
7	17615012.78	4885269.34	8.20	0	N	4000	73.0	0.0	-3.0	0.0	0.0	52.5	3.9	-2.8	0.0	0.0	0.0	0.0	0.0	16.5

Point Source, ISO 9613, Name: "Rooftop Unit", ID: "EP_RTU_7T"																				
Nr.	X	Y	Z	Refl.	DEN	Freq.	Lw	l/a	Optime	K0	Di	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	Lr
	(m)	(m)	(m)			(Hz)	dB(A)	dB	dB	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)
7	17615012.78	4885269.34	8.20	0	N	8000	66.0	0.0	-3.0	0.0	0.0	52.5	13.8	-2.8	0.0	0.0	0.0	0.0	0.0	-0.5
7	17615012.78	4885269.34	8.20	0	E	125	76.0	0.0	0.0	0.0	0.0	52.5	0.0	-2.8	0.0	0.0	0.0	0.0	0.0	26.3
7	17615012.78	4885269.34	8.20	0	E	250	79.0	0.0	0.0	0.0	0.0	52.5	0.1	-2.8	0.0	0.0	0.0	0.0	0.0	29.3
7	17615012.78	4885269.34	8.20	0	E	500	84.0	0.0	0.0	0.0	0.0	52.5	0.2	-2.8	0.0	0.0	0.0	0.0	0.0	34.2
7	17615012.78	4885269.34	8.20	0	E	1000	83.0	0.0	0.0	0.0	0.0	52.5	0.4	-2.8	0.0	0.0	0.0	0.0	0.0	33.0
7	17615012.78	4885269.34	8.20	0	E	2000	79.0	0.0	0.0	0.0	0.0	52.5	1.1	-2.8	0.0	0.0	0.0	0.0	0.0	28.2
7	17615012.78	4885269.34	8.20	0	E	4000	73.0	0.0	0.0	0.0	0.0	52.5	3.9	-2.8	0.0	0.0	0.0	0.0	0.0	19.5
7	17615012.78	4885269.34	8.20	0	E	8000	66.0	0.0	0.0	0.0	0.0	52.5	13.8	-2.8	0.0	0.0	0.0	0.0	0.0	2.5
8	17615012.78	4885269.34	8.20	1	D	1000	83.0	0.0	0.0	0.0	0.0	52.5	0.4	-2.8	0.0	0.0	0.0	0.0	2.0	30.8
8	17615012.78	4885269.34	8.20	1	D	2000	79.0	0.0	0.0	0.0	0.0	52.5	1.2	-2.8	0.0	0.0	0.0	0.0	2.0	26.1
8	17615012.78	4885269.34	8.20	1	D	4000	73.0	0.0	0.0	0.0	0.0	52.5	3.9	-2.8	0.0	0.0	0.0	0.0	2.0	17.4
8	17615012.78	4885269.34	8.20	1	D	8000	66.0	0.0	0.0	0.0	0.0	52.5	14.0	-2.8	0.0	0.0	0.0	0.0	2.0	0.3
8	17615012.78	4885269.34	8.20	1	N	1000	83.0	0.0	-3.0	0.0	0.0	52.5	0.4	-2.8	0.0	0.0	0.0	0.0	2.0	27.8
8	17615012.78	4885269.34	8.20	1	N	2000	79.0	0.0	-3.0	0.0	0.0	52.5	1.2	-2.8	0.0	0.0	0.0	0.0	2.0	23.1
8	17615012.78	4885269.34	8.20	1	N	4000	73.0	0.0	-3.0	0.0	0.0	52.5	3.9	-2.8	0.0	0.0	0.0	0.0	2.0	14.4
8	17615012.78	4885269.34	8.20	1	N	8000	66.0	0.0	-3.0	0.0	0.0	52.5	14.0	-2.8	0.0	0.0	0.0	0.0	2.0	-2.7
8	17615012.78	4885269.34	8.20	1	E	1000	83.0	0.0	0.0	0.0	0.0	52.5	0.4	-2.8	0.0	0.0	0.0	0.0	2.0	30.8
8	17615012.78	4885269.34	8.20	1	E	2000	79.0	0.0	0.0	0.0	0.0	52.5	1.2	-2.8	0.0	0.0	0.0	0.0	2.0	26.1
8	17615012.78	4885269.34	8.20	1	E	4000	73.0	0.0	0.0	0.0	0.0	52.5	3.9	-2.8	0.0	0.0	0.0	0.0	2.0	17.4
8	17615012.78	4885269.34	8.20	1	E	8000	66.0	0.0	0.0	0.0	0.0	52.5	14.0	-2.8	0.0	0.0	0.0	0.0	2.0	0.3
9	17615012.78	4885269.34	8.20	1	D	8000	66.0	0.0	0.0	0.0	0.0	52.8	14.3	-2.8	0.0	0.0	10.2	0.0	2.0	-10.5
9	17615012.78	4885269.34	8.20	1	N	8000	66.0	0.0	-3.0	0.0	0.0	52.8	14.3	-2.8	0.0	0.0	10.2	0.0	2.0	-13.5
9	17615012.78	4885269.34	8.20	1	E	8000	66.0	0.0	0.0	0.0	0.0	52.8	14.3	-2.8	0.0	0.0	10.2	0.0	2.0	-10.5

Point Source, ISO 9613, Name: "Rooftop Unit", ID: "EP_RTU_10T"																				
Nr.	X	Y	Z	Refl.	DEN	Freq.	Lw	l/a	Optime	K0	Di	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	Lr
	(m)	(m)	(m)			(Hz)	dB(A)	dB	dB	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)
10	17615012.20	4885280.82	8.20	0	D	125	76.0	0.0	0.0	0.0	0.0	53.3	0.1	-2.8	0.0	0.0	0.0	0.0	0.0	25.5
10	17615012.20	4885280.82	8.20	0	D	250	79.0	0.0	0.0	0.0	0.0	53.3	0.1	-2.9	0.0	0.0	0.0	0.0	0.0	28.5
10	17615012.20	4885280.82	8.20	0	D	500	84.0	0.0	0.0	0.0	0.0	53.3	0.3	-2.9	0.0	0.0	0.0	0.0	0.0	33.3
10	17615012.20	4885280.82	8.20	0	D	1000	83.0	0.0	0.0	0.0	0.0	53.3	0.5	-2.9	0.0	0.0	0.0	0.0	0.0	32.1
10	17615012.20	4885280.82	8.20	0	D	2000	79.0	0.0	0.0	0.0	0.0	53.3	1.3	-2.9	0.0	0.0	0.0	0.0	0.0	27.3
10	17615012.20	4885280.82	8.20	0	D	4000	73.0	0.0	0.0	0.0	0.0	53.3	4.3	-2.9	0.0	0.0	0.0	0.0	0.0	18.3
10	17615012.20	4885280.82	8.20	0	D	8000	66.0	0.0	0.0	0.0	0.0	53.3	15.2	-2.9	0.0	0.0	0.0	0.0	0.0	0.4
10	17615012.20	4885280.82	8.20	0	N	125	76.0	0.0	-3.0	0.0	0.0	53.3	0.1	-2.8	0.0	0.0	0.0	0.0	0.0	22.5
10	17615012.20	4885280.82	8.20	0	N	250	79.0	0.0	-3.0	0.0	0.0	53.3	0.1	-2.9	0.0	0.0	0.0	0.0	0.0	25.4
10	17615012.20	4885280.82	8.20	0	N	500	84.0	0.0	-3.0	0.0	0.0	53.3	0.3	-2.9	0.0	0.0	0.0	0.0	0.0	30.3
10	17615012.20	4885280.82	8.20	0	N	1000	83.0	0.0	-3.0	0.0	0.0	53.3	0.5	-2.9	0.0	0.0	0.0	0.0	0.0	29.1
10	17615012.20	4885280.82	8.20	0	N	2000	79.0	0.0	-3.0	0.0	0.0	53.3	1.3	-2.9	0.0	0.0	0.0	0.0	0.0	24.3
10	17615012.20	4885280.82	8.20	0	N	4000	73.0	0.0	-3.0	0.0	0.0	53.3	4.3	-2.9	0.0	0.0	0.0	0.0	0.0	15.3
10	17615012.20	4885280.82	8.20	0	N	8000	66.0	0.0	-3.0	0.0	0.0	53.3	15.2	-2.9	0.0	0.0	0.0	0.0	0.0	-2.6
10	17615012.20	4885280.82	8.20	0	E	125	76.0	0.0	0.0	0.0	0.0	53.3	0.1	-2.8	0.0	0.0	0.0	0.0	0.0	25.5
10	17615012.20	4885280.82	8.20	0	E	250	79.0	0.0	0.0	0.0	0.0	53.3	0.1	-2.9	0.0	0.0	0.0	0.0	0.0	28.5
10	17615012.20	4885280.82	8.20	0	E	500	84.0	0.0	0.0	0.0	0.0	53.3	0.3	-2.9	0.0	0.0	0.0	0.0	0.0	33.3
10	17615012.20	4885280.82	8.20	0	E	1000	83.0	0.0	0.0	0.0	0.0	53.3	0.5	-2.9	0.0	0.0	0.0	0.0	0.0	32.1
10	17615012.20	4885280.82	8.20	0	E	2000	79.0	0.0	0.0	0.0	0.0	53.3	1.3	-2.9	0.0	0.0	0.0	0.0	0.0	27.3
10	17615012.20	4885280.82	8.20	0	E	4000	73.0	0.0	0.0	0.0	0.0	53.3	4.3	-2.9	0.0	0.0	0.0	0.0	0.0	18.3
10	17615012.20	4885280.82	8.20	0	E	8000	66.0	0.0	0.0	0.0	0.0	53.3	15.2	-2.9	0.0	0.0	0.0	0.0	0.0	0.4
11	17615012.20	4885280.82	8.20	1	D	4000	73.0	0.0	0.0	0.0	0.0	56.6	6.2	-3.0	0.0	0.0	7.8	0.0	2.0	3.4
11	17615012.20	4885280.82	8.20	1	D	8000	66.0	0.0	0.0	0.0	0.0	56.6	22.2	-3.0	0.0	0.0	7.8	0.0	2.0	-19.6
11	17615012.20	4885280.82	8.20	1	N	4000	73.0	0.0	-3.0	0.0	0.0	56.6	6.2	-3.0	0.0	0.0	7.8	0.0	2.0	0.4
11	17615012.20	4885280.82	8.20	1	N	8000	66.0	0.0	-3.0	0.0	0.0	56.6	22.2	-3.0	0.0	0.0	7.8	0.0	2.0	-22.6
11	17615012.20	4885280.82	8.20	1	E	4000	73.0	0.0	0.0	0.0	0.0	56.6	6.2	-3.0	0.0	0.0	7.8	0.0	2.0	3.4
11	17615012.20	4885280.82	8.20	1	E	8000	66.0	0.0	0.0	0.0	0.0	56.6	22.2	-3.0	0.0	0.0	7.8	0.0	2.0	-19.6
12	17615012.20	4885280.82	8.20	2	D	4000	73.0	0.0	0.0	0.0	0.0	56.7	6.3	-3.0	0.0	0.0	7.8	0.0	4.0	1.2
12	17615012.20	4885280.82	8.20	2	D	8000	66.0	0.0	0.0	0.0	0.0	56.7	22.5	-3.0	0.0	0.0	7.8	0.0	4.0	-22.0
12	17615012.20	4885280.82	8.20	2	N	4000	73.0	0.0	-3.0	0.0	0.0	56.7	6.3	-3.0	0.0	0.0	7.8	0.0	4.0	-1.8
12	17615012.20	4885280.82	8.20	2	N	8000	66.0	0.0	-3.0	0.0	0.0	56.7	22.5	-3.0	0.0	0.0	7.8	0.0	4.0	-25.0
12	17615012.20	4885280.82	8.20	2	E	4000	73.0	0.0	0.0	0.0	0.0	56.7	6.3	-3.0	0.0	0.0	7.8	0.0	4.0	1.2
12	17615012.20	4885280.82	8.20	2	E	8000	66.0	0.0	0.0	0.0	0.0	56.7	22.5	-3.0	0.0	0.0	7.8	0.0	4.0	-22.0
13	17615012.20	4885280.82	8.20	1	D	500	84.0	0.0	0.0	0.0	0.0	53.3	0.3	-2.8	0.0	0.0	0.0	0.0	2.0	31.3
13	17615012.20	4885280.82	8.20	1	D	1000	83.0	0.0	0.0	0.0	0.0	53.3	0.5	-2.8	0.0	0.0	0.0	0.0	2.0	30.1
13	17615012.20	4885280.82	8.20	1	D	2000	79.0	0.0	0.0	0.0	0.0	53.3	1.3	-2.8	0.0	0.0	0.0	0.0	2.0	25.3

Point Source, ISO 9613, Name: "Rooftop Unit", ID: "EP_RTU_10T"																				
Nr.	X	Y	Z	Refl.	DEN	Freq.	Lw	l/a	Optime	K0	Di	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	Lr
	(m)	(m)	(m)			(Hz)	dB(A)	dB	dB	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)
13	17615012.20	4885280.82	8.20	1	D	4000	73.0	0.0	0.0	0.0	0.0	53.3	4.3	-2.8	0.0	0.0	0.0	0.0	2.0	16.3
13	17615012.20	4885280.82	8.20	1	D	8000	66.0	0.0	0.0	0.0	0.0	53.3	15.2	-2.8	0.0	0.0	0.0	0.0	2.0	-1.7
13	17615012.20	4885280.82	8.20	1	N	500	84.0	0.0	-3.0	0.0	0.0	53.3	0.3	-2.8	0.0	0.0	0.0	0.0	2.0	28.3
13	17615012.20	4885280.82	8.20	1	N	1000	83.0	0.0	-3.0	0.0	0.0	53.3	0.5	-2.8	0.0	0.0	0.0	0.0	2.0	27.0
13	17615012.20	4885280.82	8.20	1	N	2000	79.0	0.0	-3.0	0.0	0.0	53.3	1.3	-2.8	0.0	0.0	0.0	0.0	2.0	22.3
13	17615012.20	4885280.82	8.20	1	N	4000	73.0	0.0	-3.0	0.0	0.0	53.3	4.3	-2.8	0.0	0.0	0.0	0.0	2.0	13.3
13	17615012.20	4885280.82	8.20	1	N	8000	66.0	0.0	-3.0	0.0	0.0	53.3	15.2	-2.8	0.0	0.0	0.0	0.0	2.0	-4.7
13	17615012.20	4885280.82	8.20	1	E	500	84.0	0.0	0.0	0.0	0.0	53.3	0.3	-2.8	0.0	0.0	0.0	0.0	2.0	31.3
13	17615012.20	4885280.82	8.20	1	E	1000	83.0	0.0	0.0	0.0	0.0	53.3	0.5	-2.8	0.0	0.0	0.0	0.0	2.0	30.1
13	17615012.20	4885280.82	8.20	1	E	2000	79.0	0.0	0.0	0.0	0.0	53.3	1.3	-2.8	0.0	0.0	0.0	0.0	2.0	25.3
13	17615012.20	4885280.82	8.20	1	E	4000	73.0	0.0	0.0	0.0	0.0	53.3	4.3	-2.8	0.0	0.0	0.0	0.0	2.0	16.3
13	17615012.20	4885280.82	8.20	1	E	8000	66.0	0.0	0.0	0.0	0.0	53.3	15.2	-2.8	0.0	0.0	0.0	0.0	2.0	-1.7

Point Source, ISO 9613, Name: "Rooftop Unit", ID: "EP_RTU_10T"																				
Nr.	X	Y	Z	Refl.	DEN	Freq.	Lw	l/a	Optime	K0	Di	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	Lr
	(m)	(m)	(m)			(Hz)	dB(A)	dB	dB	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)
14	17615011.49	4885284.02	8.20	0	D	125	76.0	0.0	0.0	0.0	0.0	53.5	0.1	-2.8	0.0	0.0	0.0	0.0	0.0	25.3
14	17615011.49	4885284.02	8.20	0	D	250	79.0	0.0	0.0	0.0	0.0	53.5	0.1	-2.9	0.0	0.0	0.0	0.0	0.0	28.2
14	17615011.49	4885284.02	8.20	0	D	500	84.0	0.0	0.0	0.0	0.0	53.5	0.3	-2.9	0.0	0.0	0.0	0.0	0.0	33.1
14	17615011.49	4885284.02	8.20	0	D	1000	83.0	0.0	0.0	0.0	0.0	53.5	0.5	-2.9	0.0	0.0	0.0	0.0	0.0	31.9
14	17615011.49	4885284.02	8.20	0	D	2000	79.0	0.0	0.0	0.0	0.0	53.5	1.3	-2.9	0.0	0.0	0.0	0.0	0.0	27.1
14	17615011.49	4885284.02	8.20	0	D	4000	73.0	0.0	0.0	0.0	0.0	53.5	4.4	-2.9	0.0	0.0	0.0	0.0	0.0	18.0
14	17615011.49	4885284.02	8.20	0	D	8000	66.0	0.0	0.0	0.0	0.0	53.5	15.6	-2.9	0.0	0.0	0.0	0.0	0.0	-0.2
14	17615011.49	4885284.02	8.20	0	N	125	76.0	0.0	-3.0	0.0	0.0	53.5	0.1	-2.8	0.0	0.0	0.0	0.0	0.0	22.2
14	17615011.49	4885284.02	8.20	0	N	250	79.0	0.0	-3.0	0.0	0.0	53.5	0.1	-2.9	0.0	0.0	0.0	0.0	0.0	25.2
14	17615011.49	4885284.02	8.20	0	N	500	84.0	0.0	-3.0	0.0	0.0	53.5	0.3	-2.9	0.0	0.0	0.0	0.0	0.0	30.1
14	17615011.49	4885284.02	8.20	0	N	1000	83.0	0.0	-3.0	0.0	0.0	53.5	0.5	-2.9	0.0	0.0	0.0	0.0	0.0	28.9
14	17615011.49	4885284.02	8.20	0	N	2000	79.0	0.0	-3.0	0.0	0.0	53.5	1.3	-2.9	0.0	0.0	0.0	0.0	0.0	24.1
14	17615011.49	4885284.02	8.20	0	N	4000	73.0	0.0	-3.0	0.0	0.0	53.5	4.4	-2.9	0.0	0.0	0.0	0.0	0.0	15.0
14	17615011.49	4885284.02	8.20	0	N	8000	66.0	0.0	-3.0	0.0	0.0	53.5	15.6	-2.9	0.0	0.0	0.0	0.0	0.0	-3.2
14	17615011.49	4885284.02	8.20	0	E	125	76.0	0.0	0.0	0.0	0.0	53.5	0.1	-2.8	0.0	0.0	0.0	0.0	0.0	25.3
14	17615011.49	4885284.02	8.20	0	E	250	79.0	0.0	0.0	0.0	0.0	53.5	0.1	-2.9	0.0	0.0	0.0	0.0	0.0	28.2
14	17615011.49	4885284.02	8.20	0	E	500	84.0	0.0	0.0	0.0	0.0	53.5	0.3	-2.9	0.0	0.0	0.0	0.0	0.0	33.1
14	17615011.49	4885284.02	8.20	0	E	1000	83.0	0.0	0.0	0.0	0.0	53.5	0.5	-2.9	0.0	0.0	0.0	0.0	0.0	31.9
14	17615011.49	4885284.02	8.20	0	E	2000	79.0	0.0	0.0	0.0	0.0	53.5	1.3	-2.9	0.0	0.0	0.0	0.0	0.0	27.1
14	17615011.49	4885284.02	8.20	0	E	4000	73.0	0.0	0.0	0.0	0.0	53.5	4.4	-2.9	0.0	0.0	0.0	0.0	0.0	18.0
14	17615011.49	4885284.02	8.20	0	E	8000	66.0	0.0	0.0	0.0	0.0	53.5	15.6	-2.9	0.0	0.0	0.0	0.0	0.0	-0.2
15	17615011.49	4885284.02	8.20	1	D	4000	73.0	0.0	0.0	0.0	0.0	56.7	6.3	-3.0	0.0	0.0	7.8	0.0	2.0	3.2
15	17615011.49	4885284.02	8.20	1	D	8000	66.0	0.0	0.0	0.0	0.0	56.7	22.5	-3.0	0.0	0.0	7.8	0.0	2.0	-20.0
15	17615011.49	4885284.02	8.20	1	N	4000	73.0	0.0	-3.0	0.0	0.0	56.7	6.3	-3.0	0.0	0.0	7.8	0.0	2.0	0.2
15	17615011.49	4885284.02	8.20	1	N	8000	66.0	0.0	-3.0	0.0	0.0	56.7	22.5	-3.0	0.0	0.0	7.8	0.0	2.0	-23.0
15	17615011.49	4885284.02	8.20	1	E	4000	73.0	0.0	0.0	0.0	0.0	56.7	6.3	-3.0	0.0	0.0	7.8	0.0	2.0	3.2
15	17615011.49	4885284.02	8.20	1	E	8000	66.0	0.0	0.0	0.0	0.0	56.7	22.5	-3.0	0.0	0.0	7.8	0.0	2.0	-20.0
16	17615011.49	4885284.02	8.20	2	D	4000	73.0	0.0	0.0	0.0	0.0	56.8	6.4	-3.0	0.0	0.0	7.8	0.0	4.0	1.0
16	17615011.49	4885284.02	8.20	2	D	8000	66.0	0.0	0.0	0.0	0.0	56.8	22.8	-3.0	0.0	0.0	7.8	0.0	4.0	-22.4
16	17615011.49	4885284.02	8.20	2	N	4000	73.0	0.0	-3.0	0.0	0.0	56.8	6.4	-3.0	0.0	0.0	7.8	0.0	4.0	-2.0
16	17615011.49	4885284.02	8.20	2	N	8000	66.0	0.0	-3.0	0.0	0.0	56.8	22.8	-3.0	0.0	0.0	7.8	0.0	4.0	-25.4
16	17615011.49	4885284.02	8.20	2	E	4000	73.0	0.0	0.0	0.0	0.0	56.8	6.4	-3.0	0.0	0.0	7.8	0.0	4.0	1.0
16	17615011.49	4885284.02	8.20	2	E	8000	66.0	0.0	0.0	0.0	0.0	56.8	22.8	-3.0	0.0	0.0	7.8	0.0	4.0	-22.4
17	17615011.49	4885284.02	8.20	1	D	500	84.0	0.0	0.0	0.0	0.0	53.5	0.3	-2.8	0.0	0.0	0.0	0.0	2.0	31.1
17	17615011.49	4885284.02	8.20	1	D	1000	83.0	0.0	0.0	0.0	0.0	53.5	0.5	-2.8	0.0	0.0	0.0	0.0	2.0	29.8
17	17615011.49	4885284.02	8.20	1	D	2000	79.0	0.0	0.0	0.0	0.0	53.5	1.3	-2.8	0.0	0.0	0.0	0.0	2.0	25.0
17	17615011.49	4885284.02	8.20	1	D	4000	73.0	0.0	0.0	0.0	0.0	53.5	4.4	-2.8	0.0	0.0	0.0	0.0	2.0	16.0
17	17615011.49	4885284.02	8.20	1	D	8000	66.0	0.0	0.0	0.0	0.0	53.5	15.6	-2.8	0.0	0.0	0.0	0.0	2.0	-2.3
17	17615011.49	4885284.02	8.20	1	N	500	84.0	0.0	-3.0	0.0	0.0	53.5	0.3	-2.8	0.0	0.0	0.0	0.0	2.0	28.1
17	17615011.49	4885284.02	8.20	1	N	1000	83.0	0.0	-3.0	0.0	0.0	53.5	0.5	-2.8	0.0	0.0	0.0	0.0	2.0	26.8
17	17615011.49	4885284.02	8.20	1	N	2000	79.0	0.0	-3.0	0.0	0.0	53.5	1.3	-2.8	0.0	0.0	0.0	0.0	2.0	22.0
17	17615011.49	4885284.02	8.20	1	N	4000	73.0	0.0	-3.0	0.0	0.0	53.5	4.4	-2.8	0.0	0.0	0.0	0.0	2.0	12.9
17	17615011.49	4885284.02	8.20	1	N	8000	66.0	0.0	-3.0	0.0	0.0	53.5	15.6	-2.8	0.0	0.0	0.0	0.0	2.0	-5.3
17	17615011.49	4885284.02	8.20	1	E	500	84.0	0.0	0.0	0.0	0.0	53.5	0.3	-2.8	0.0	0.0	0.0	0.0	2.0	31.1
17	17615011.49	4885284.02	8.20	1	E	1000	83.0	0.0	0.0	0.0	0.0	53.5	0.5	-2.8	0.0	0.0	0.0	0.0	2.0	29.8
17	17615011.49	4885284.02	8.20	1	E	2000	79.0	0.0	0.0	0.0	0.0	53.5	1.3	-2.8	0.0	0.0	0.0	0.0	2.0	25.0
17	17615011.49	4885284.02	8.20	1	E	4000	73.0	0.0	0.0	0.0	0.0	53.5	4.4	-2.8	0.0	0.0	0.0	0.0	2.0	16.0

Point Source, ISO 9613, Name: "Rooftop Unit", ID: "EP_RTU_10T"																				
Nr.	X	Y	Z	Refl.	DEN	Freq.	Lw	l/a	Optime	K0	Di	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	Lr
	(m)	(m)	(m)			(Hz)	dB(A)	dB	dB	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)
17	17615011.49	4885284.02	8.20	1	E	8000	66.0	0.0	0.0	0.0	0.0	53.5	15.6	-2.8	0.0	0.0	0.0	0.0	2.0	-2.3

Point Source, ISO 9613, Name: "Rooftop unit", ID: "EP_RTU_5T"																				
Nr.	X	Y	Z	Refl.	DEN	Freq.	Lw	l/a	Optime	K0	Di	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	Lr
	(m)	(m)	(m)			(Hz)	dB(A)	dB	dB	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)
18	17615035.24	4885268.68	4.20	0	D	125	67.0	0.0	0.0	0.0	0.0	52.4	0.0	-2.6	0.0	0.0	13.5	0.0	0.0	3.6
18	17615035.24	4885268.68	4.20	0	D	250	72.0	0.0	0.0	0.0	0.0	52.4	0.1	-2.7	0.0	0.0	17.0	0.0	0.0	5.2
18	17615035.24	4885268.68	4.20	0	D	500	77.0	0.0	0.0	0.0	0.0	52.4	0.2	-2.8	0.0	0.0	20.2	0.0	0.0	7.0
18	17615035.24	4885268.68	4.20	0	D	1000	76.0	0.0	0.0	0.0	0.0	52.4	0.4	-2.8	0.0	0.0	23.2	0.0	0.0	2.8
18	17615035.24	4885268.68	4.20	0	D	2000	73.0	0.0	0.0	0.0	0.0	52.4	1.1	-2.8	0.0	0.0	26.0	0.0	0.0	-3.7
18	17615035.24	4885268.68	4.20	0	D	4000	68.0	0.0	0.0	0.0	0.0	52.4	3.9	-2.8	0.0	0.0	26.8	0.0	0.0	-12.2
18	17615035.24	4885268.68	4.20	0	D	8000	61.0	0.0	0.0	0.0	0.0	52.4	13.8	-2.8	0.0	0.0	27.3	0.0	0.0	-29.6
18	17615035.24	4885268.68	4.20	0	N	125	67.0	0.0	-3.0	0.0	0.0	52.4	0.0	-2.6	0.0	0.0	13.5	0.0	0.0	0.6
18	17615035.24	4885268.68	4.20	0	N	250	72.0	0.0	-3.0	0.0	0.0	52.4	0.1	-2.7	0.0	0.0	17.0	0.0	0.0	2.2
18	17615035.24	4885268.68	4.20	0	N	500	77.0	0.0	-3.0	0.0	0.0	52.4	0.2	-2.8	0.0	0.0	20.2	0.0	0.0	4.0
18	17615035.24	4885268.68	4.20	0	N	1000	76.0	0.0	-3.0	0.0	0.0	52.4	0.4	-2.8	0.0	0.0	23.2	0.0	0.0	-0.2
18	17615035.24	4885268.68	4.20	0	N	2000	73.0	0.0	-3.0	0.0	0.0	52.4	1.1	-2.8	0.0	0.0	26.0	0.0	0.0	-6.7
18	17615035.24	4885268.68	4.20	0	N	4000	68.0	0.0	-3.0	0.0	0.0	52.4	3.9	-2.8	0.0	0.0	26.8	0.0	0.0	-15.2
18	17615035.24	4885268.68	4.20	0	N	8000	61.0	0.0	-3.0	0.0	0.0	52.4	13.8	-2.8	0.0	0.0	27.3	0.0	0.0	-32.6
18	17615035.24	4885268.68	4.20	0	E	125	67.0	0.0	0.0	0.0	0.0	52.4	0.0	-2.6	0.0	0.0	13.5	0.0	0.0	3.6
18	17615035.24	4885268.68	4.20	0	E	250	72.0	0.0	0.0	0.0	0.0	52.4	0.1	-2.7	0.0	0.0	17.0	0.0	0.0	5.2
18	17615035.24	4885268.68	4.20	0	E	500	77.0	0.0	0.0	0.0	0.0	52.4	0.2	-2.8	0.0	0.0	20.2	0.0	0.0	7.0
18	17615035.24	4885268.68	4.20	0	E	1000	76.0	0.0	0.0	0.0	0.0	52.4	0.4	-2.8	0.0	0.0	23.2	0.0	0.0	2.8
18	17615035.24	4885268.68	4.20	0	E	2000	73.0	0.0	0.0	0.0	0.0	52.4	1.1	-2.8	0.0	0.0	26.0	0.0	0.0	-3.7
18	17615035.24	4885268.68	4.20	0	E	4000	68.0	0.0	0.0	0.0	0.0	52.4	3.9	-2.8	0.0	0.0	26.8	0.0	0.0	-12.2
18	17615035.24	4885268.68	4.20	0	E	8000	61.0	0.0	0.0	0.0	0.0	52.4	13.8	-2.8	0.0	0.0	27.3	0.0	0.0	-29.6
19	17615035.24	4885268.68	4.20	1	D	125	67.0	0.0	0.0	0.0	0.0	53.2	0.1	-2.5	0.0	0.0	11.8	0.0	2.0	2.5
19	17615035.24	4885268.68	4.20	1	D	250	72.0	0.0	0.0	0.0	0.0	53.2	0.1	-2.7	0.0	0.0	15.0	0.0	2.0	4.3
19	17615035.24	4885268.68	4.20	1	D	500	77.0	0.0	0.0	0.0	0.0	53.2	0.2	-2.8	0.0	0.0	18.3	0.0	2.0	6.1
19	17615035.24	4885268.68	4.20	1	D	1000	76.0	0.0	0.0	0.0	0.0	53.2	0.5	-2.8	0.0	0.0	21.2	0.0	2.0	1.9
19	17615035.24	4885268.68	4.20	1	D	2000	73.0	0.0	0.0	0.0	0.0	53.2	1.2	-2.8	0.0	0.0	24.2	0.0	2.0	-4.8
19	17615035.24	4885268.68	4.20	1	D	4000	68.0	0.0	0.0	0.0	0.0	53.2	4.2	-2.8	0.0	0.0	27.2	0.0	2.0	-15.8
19	17615035.24	4885268.68	4.20	1	D	8000	61.0	0.0	0.0	0.0	0.0	53.2	15.1	-2.8	0.0	0.0	27.8	0.0	2.0	-34.3
19	17615035.24	4885268.68	4.20	1	N	125	67.0	0.0	-3.0	0.0	0.0	53.2	0.1	-2.5	0.0	0.0	11.8	0.0	2.0	-0.6
19	17615035.24	4885268.68	4.20	1	N	250	72.0	0.0	-3.0	0.0	0.0	53.2	0.1	-2.7	0.0	0.0	15.0	0.0	2.0	1.3
19	17615035.24	4885268.68	4.20	1	N	500	77.0	0.0	-3.0	0.0	0.0	53.2	0.2	-2.8	0.0	0.0	18.3	0.0	2.0	3.1
19	17615035.24	4885268.68	4.20	1	N	1000	76.0	0.0	-3.0	0.0	0.0	53.2	0.5	-2.8	0.0	0.0	21.2	0.0	2.0	-1.1
19	17615035.24	4885268.68	4.20	1	N	2000	73.0	0.0	-3.0	0.0	0.0	53.2	1.2	-2.8	0.0	0.0	24.2	0.0	2.0	-7.8
19	17615035.24	4885268.68	4.20	1	N	4000	68.0	0.0	-3.0	0.0	0.0	53.2	4.2	-2.8	0.0	0.0	27.2	0.0	2.0	-18.8
19	17615035.24	4885268.68	4.20	1	N	8000	61.0	0.0	-3.0	0.0	0.0	53.2	15.1	-2.8	0.0	0.0	27.8	0.0	2.0	-37.3
19	17615035.24	4885268.68	4.20	1	E	125	67.0	0.0	0.0	0.0	0.0	53.2	0.1	-2.5	0.0	0.0	11.8	0.0	2.0	2.5
19	17615035.24	4885268.68	4.20	1	E	250	72.0	0.0	0.0	0.0	0.0	53.2	0.1	-2.7	0.0	0.0	15.0	0.0	2.0	4.3
19	17615035.24	4885268.68	4.20	1	E	500	77.0	0.0	0.0	0.0	0.0	53.2	0.2	-2.8	0.0	0.0	18.3	0.0	2.0	6.1
19	17615035.24	4885268.68	4.20	1	E	1000	76.0	0.0	0.0	0.0	0.0	53.2	0.5	-2.8	0.0	0.0	21.2	0.0	2.0	1.9
19	17615035.24	4885268.68	4.20	1	E	2000	73.0	0.0	0.0	0.0	0.0	53.2	1.2	-2.8	0.0	0.0	24.2	0.0	2.0	-4.8
19	17615035.24	4885268.68	4.20	1	E	4000	68.0	0.0	0.0	0.0	0.0	53.2	4.2	-2.8	0.0	0.0	27.2	0.0	2.0	-15.8
19	17615035.24	4885268.68	4.20	1	E	8000	61.0	0.0	0.0	0.0	0.0	53.2	15.1	-2.8	0.0	0.0	27.8	0.0	2.0	-34.3
20	17615035.24	4885268.68	4.20	2	D	125	67.0	0.0	0.0	0.0	0.0	53.9	0.1	-2.4	0.0	0.0	10.5	0.0	4.0	1.0
20	17615035.24	4885268.68	4.20	2	D	250	72.0	0.0	0.0	0.0	0.0	53.9	0.1	-2.6	0.0	0.0	13.4	0.0	4.0	3.1
20	17615035.24	4885268.68	4.20	2	D	500	77.0	0.0	0.0	0.0	0.0	53.9	0.3	-2.8	0.0	0.0	16.6	0.0	4.0	5.0
20	17615035.24	4885268.68	4.20	2	D	1000	76.0	0.0	0.0	0.0	0.0	53.9	0.5	-2.8	0.0	0.0	19.5	0.0	4.0	0.9
20	17615035.24	4885268.68	4.20	2	D	2000	73.0	0.0	0.0	0.0	0.0	53.9	1.3	-2.8	0.0	0.0	22.4	0.0	4.0	-5.9
20	17615035.24	4885268.68	4.20	2	D	4000	68.0	0.0	0.0	0.0	0.0	53.9	4.6	-2.8	0.0	0.0	25.4	0.0	4.0	-17.0
20	17615035.24	4885268.68	4.20	2	D	8000	61.0	0.0	0.0	0.0	0.0	53.9	16.2	-2.8	0.0	0.0	27.8	0.0	4.0	-38.1
20	17615035.24	4885268.68	4.20	2	N	125	67.0	0.0	-3.0	0.0	0.0	53.9	0.1	-2.4	0.0	0.0	10.5	0.0	4.0	-2.0
20	17615035.24	4885268.68	4.20	2	N	250	72.0	0.0	-3.0	0.0	0.0	53.9	0.1	-2.6	0.0	0.0	13.4	0.0	4.0	0.1
20	17615035.24	4885268.68	4.20	2	N	500	77.0	0.0	-3.0	0.0	0.0	53.9	0.3	-2.8	0.0	0.0	16.6	0.0	4.0	2.0
20	17615035.24	4885268.68	4.20	2	N	1000	76.0	0.0	-3.0	0.0	0.0	53.9	0.5	-2.8	0.0	0.0	19.5	0.0	4.0	-2.1
20	17615035.24	4885268.68	4.20	2	N	2000	73.0	0.0	-3.0	0.0	0.0	53.9	1.3	-2.8	0.0	0.0	22.4	0.0	4.0	-8.9
20	17615035.24	4885268.68	4.20	2	N	4000	68.0	0.0	-3.0	0.0	0.0	53.9	4.6	-2.8	0.0	0.0	25.4	0.0	4.0	-20.0
20	17615035.24	4885268.68	4.20	2	N	8000	61.0	0.0	-3.0	0.0	0.0	53.9	16.2	-2.8	0.0	0.0	27.8	0.0	4.0	-41.1
20	17615035.24	4885268.68	4.20	2	E	125	67.0	0.0	0.0	0.0	0.0	53.9	0.1	-2.4	0.0	0.0	10.5	0.0	4.0	1.0
20	17615035.24	4885268.68	4.20	2	E	250	72.0	0.0	0.0	0.0	0.0	53.9	0.1	-2.6	0.0	0.0	13.4	0.0	4.0	3.1

Point Source, ISO 9613, Name: "Rooftop unit", ID: "EP_RTU_5T"																				
Nr.	X	Y	Z	Refl.	DEN	Freq.	Lw	l/a	Optime	K0	Di	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	Lr
	(m)	(m)	(m)			(Hz)	dB(A)	dB	dB	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)
20	17615035.24	4885268.68	4.20	2	E	500	77.0	0.0	0.0	0.0	0.0	53.9	0.3	-2.8	0.0	0.0	16.6	0.0	4.0	5.0
20	17615035.24	4885268.68	4.20	2	E	1000	76.0	0.0	0.0	0.0	0.0	53.9	0.5	-2.8	0.0	0.0	19.5	0.0	4.0	0.9
20	17615035.24	4885268.68	4.20	2	E	2000	73.0	0.0	0.0	0.0	0.0	53.9	1.3	-2.8	0.0	0.0	22.4	0.0	4.0	-5.9
20	17615035.24	4885268.68	4.20	2	E	4000	68.0	0.0	0.0	0.0	0.0	53.9	4.6	-2.8	0.0	0.0	25.4	0.0	4.0	-17.0
20	17615035.24	4885268.68	4.20	2	E	8000	61.0	0.0	0.0	0.0	0.0	53.9	16.2	-2.8	0.0	0.0	27.8	0.0	4.0	-38.1



Receiver  
 Name: (untitled)  
 ID: PE\_OPOR  
 X: 17614997.40 m  
 Y: 4885073.04 m  
 Z: 1.50 m

Area Source, ISO 9613, Name: "Daikin Chiller", ID: "PE_C_2_Unmit"																				
Nr.	X (m)	Y (m)	Z (m)	Refl.	DEN	Freq. (Hz)	Lw dB(A)	l/a dB	Optime dB	K0 (dB)	Di (dB)	Adiv (dB)	Aatm (dB)	Agr (dB)	Afol (dB)	Ahous (dB)	Abar (dB)	Cmet (dB)	RL (dB)	Lr dB(A)
1	17614996.74	4885123.83	16.11	0	D	63	57.3	6.5	0.0	0.0	0.0	45.5	0.0	-3.0	0.0	0.0	0.0	0.0	0.0	21.3
1	17614996.74	4885123.83	16.11	0	D	125	69.4	6.5	0.0	0.0	0.0	45.5	0.0	-1.1	0.0	0.0	0.0	0.0	0.0	31.5
1	17614996.74	4885123.83	16.11	0	D	250	73.9	6.5	0.0	0.0	0.0	45.5	0.1	1.2	0.0	0.0	0.0	0.0	0.0	33.7
1	17614996.74	4885123.83	16.11	0	D	500	79.3	6.5	0.0	0.0	0.0	45.5	0.1	0.5	0.0	0.0	0.0	0.0	0.0	39.8
1	17614996.74	4885123.83	16.11	0	D	1000	79.5	6.5	0.0	0.0	0.0	45.5	0.2	-1.1	0.0	0.0	0.0	0.0	0.0	41.5
1	17614996.74	4885123.83	16.11	0	D	2000	74.7	6.5	0.0	0.0	0.0	45.5	0.5	-1.4	0.0	0.0	0.0	0.0	0.0	36.6
1	17614996.74	4885123.83	16.11	0	D	4000	73.5	6.5	0.0	0.0	0.0	45.5	1.7	-1.4	0.0	0.0	0.0	0.0	0.0	34.2
1	17614996.74	4885123.83	16.11	0	D	8000	71.4	6.5	0.0	0.0	0.0	45.5	6.2	-1.4	0.0	0.0	0.0	0.0	0.0	27.6
1	17614996.74	4885123.83	16.11	0	N	63	57.3	6.5	-3.0	0.0	0.0	45.5	0.0	-3.0	0.0	0.0	0.0	0.0	0.0	18.3
1	17614996.74	4885123.83	16.11	0	N	125	69.4	6.5	-3.0	0.0	0.0	45.5	0.0	-1.1	0.0	0.0	0.0	0.0	0.0	28.5
1	17614996.74	4885123.83	16.11	0	N	250	73.9	6.5	-3.0	0.0	0.0	45.5	0.1	1.2	0.0	0.0	0.0	0.0	0.0	30.6
1	17614996.74	4885123.83	16.11	0	N	500	79.3	6.5	-3.0	0.0	0.0	45.5	0.1	0.5	0.0	0.0	0.0	0.0	0.0	36.8
1	17614996.74	4885123.83	16.11	0	N	1000	79.5	6.5	-3.0	0.0	0.0	45.5	0.2	-1.1	0.0	0.0	0.0	0.0	0.0	38.4
1	17614996.74	4885123.83	16.11	0	N	2000	74.7	6.5	-3.0	0.0	0.0	45.5	0.5	-1.4	0.0	0.0	0.0	0.0	0.0	33.6
1	17614996.74	4885123.83	16.11	0	N	4000	73.5	6.5	-3.0	0.0	0.0	45.5	1.7	-1.4	0.0	0.0	0.0	0.0	0.0	31.2
1	17614996.74	4885123.83	16.11	0	N	8000	71.4	6.5	-3.0	0.0	0.0	45.5	6.2	-1.4	0.0	0.0	0.0	0.0	0.0	24.6
1	17614996.74	4885123.83	16.11	0	E	63	57.3	6.5	0.0	0.0	0.0	45.5	0.0	-3.0	0.0	0.0	0.0	0.0	0.0	21.3
1	17614996.74	4885123.83	16.11	0	E	125	69.4	6.5	0.0	0.0	0.0	45.5	0.0	-1.1	0.0	0.0	0.0	0.0	0.0	31.5
1	17614996.74	4885123.83	16.11	0	E	250	73.9	6.5	0.0	0.0	0.0	45.5	0.1	1.2	0.0	0.0	0.0	0.0	0.0	33.7
1	17614996.74	4885123.83	16.11	0	E	500	79.3	6.5	0.0	0.0	0.0	45.5	0.1	0.5	0.0	0.0	0.0	0.0	0.0	39.8
1	17614996.74	4885123.83	16.11	0	E	1000	79.5	6.5	0.0	0.0	0.0	45.5	0.2	-1.1	0.0	0.0	0.0	0.0	0.0	41.5
1	17614996.74	4885123.83	16.11	0	E	2000	74.7	6.5	0.0	0.0	0.0	45.5	0.5	-1.4	0.0	0.0	0.0	0.0	0.0	36.6
1	17614996.74	4885123.83	16.11	0	E	4000	73.5	6.5	0.0	0.0	0.0	45.5	1.7	-1.4	0.0	0.0	0.0	0.0	0.0	34.2
1	17614996.74	4885123.83	16.11	0	E	8000	71.4	6.5	0.0	0.0	0.0	45.5	6.2	-1.4	0.0	0.0	0.0	0.0	0.0	27.6
2	17614997.68	4885124.99	16.11	0	D	63	57.3	6.5	0.0	0.0	0.0	45.6	0.0	-3.0	0.0	0.0	0.0	0.0	0.0	21.1
2	17614997.68	4885124.99	16.11	0	D	125	69.4	6.5	0.0	0.0	0.0	45.6	0.0	-1.1	0.0	0.0	0.0	0.0	0.0	31.3
2	17614997.68	4885124.99	16.11	0	D	250	73.9	6.5	0.0	0.0	0.0	45.6	0.1	1.2	0.0	0.0	0.0	0.0	0.0	33.4
2	17614997.68	4885124.99	16.11	0	D	500	79.3	6.5	0.0	0.0	0.0	45.6	0.1	0.5	0.0	0.0	0.0	0.0	0.0	39.6
2	17614997.68	4885124.99	16.11	0	D	1000	79.5	6.5	0.0	0.0	0.0	45.6	0.2	-1.1	0.0	0.0	0.0	0.0	0.0	41.3
2	17614997.68	4885124.99	16.11	0	D	2000	74.7	6.5	0.0	0.0	0.0	45.6	0.5	-1.4	0.0	0.0	0.0	0.0	0.0	36.4
2	17614997.68	4885124.99	16.11	0	D	4000	73.5	6.5	0.0	0.0	0.0	45.6	1.8	-1.4	0.0	0.0	0.0	0.0	0.0	34.0
2	17614997.68	4885124.99	16.11	0	D	8000	71.4	6.5	0.0	0.0	0.0	45.6	6.3	-1.4	0.0	0.0	0.0	0.0	0.0	27.3
2	17614997.68	4885124.99	16.11	0	N	63	57.3	6.5	-3.0	0.0	0.0	45.6	0.0	-3.0	0.0	0.0	0.0	0.0	0.0	18.1
2	17614997.68	4885124.99	16.11	0	N	125	69.4	6.5	-3.0	0.0	0.0	45.6	0.0	-1.1	0.0	0.0	0.0	0.0	0.0	28.3
2	17614997.68	4885124.99	16.11	0	N	250	73.9	6.5	-3.0	0.0	0.0	45.6	0.1	1.2	0.0	0.0	0.0	0.0	0.0	30.4
2	17614997.68	4885124.99	16.11	0	N	500	79.3	6.5	-3.0	0.0	0.0	45.6	0.1	0.5	0.0	0.0	0.0	0.0	0.0	36.6
2	17614997.68	4885124.99	16.11	0	N	1000	79.5	6.5	-3.0	0.0	0.0	45.6	0.2	-1.1	0.0	0.0	0.0	0.0	0.0	38.3
2	17614997.68	4885124.99	16.11	0	N	2000	74.7	6.5	-3.0	0.0	0.0	45.6	0.5	-1.4	0.0	0.0	0.0	0.0	0.0	33.4
2	17614997.68	4885124.99	16.11	0	N	4000	73.5	6.5	-3.0	0.0	0.0	45.6	1.8	-1.4	0.0	0.0	0.0	0.0	0.0	30.9
2	17614997.68	4885124.99	16.11	0	N	8000	71.4	6.5	-3.0	0.0	0.0	45.6	6.3	-1.4	0.0	0.0	0.0	0.0	0.0	24.3
2	17614997.68	4885124.99	16.11	0	E	63	57.3	6.5	0.0	0.0	0.0	45.6	0.0	-3.0	0.0	0.0	0.0	0.0	0.0	21.1
2	17614997.68	4885124.99	16.11	0	E	125	69.4	6.5	0.0	0.0	0.0	45.6	0.0	-1.1	0.0	0.0	0.0	0.0	0.0	31.3
2	17614997.68	4885124.99	16.11	0	E	250	73.9	6.5	0.0	0.0	0.0	45.6	0.1	1.2	0.0	0.0	0.0	0.0	0.0	33.4
2	17614997.68	4885124.99	16.11	0	E	500	79.3	6.5	0.0	0.0	0.0	45.6	0.1	0.5	0.0	0.0	0.0	0.0	0.0	39.6
2	17614997.68	4885124.99	16.11	0	E	1000	79.5	6.5	0.0	0.0	0.0	45.6	0.2	-1.1	0.0	0.0	0.0	0.0	0.0	41.3
2	17614997.68	4885124.99	16.11	0	E	2000	74.7	6.5	0.0	0.0	0.0	45.6	0.5	-1.4	0.0	0.0	0.0	0.0	0.0	36.4
2	17614997.68	4885124.99	16.11	0	E	4000	73.5	6.5	0.0	0.0	0.0	45.6	1.8	-1.4	0.0	0.0	0.0	0.0	0.0	34.0
2	17614997.68	4885124.99	16.11	0	E	8000	71.4	6.5	0.0	0.0	0.0	45.6	6.3	-1.4	0.0	0.0	0.0	0.0	0.0	27.3

Area Source, ISO 9613, Name: "Daikin Chiller", ID: "PE_C_1_Unmit"																				
Nr.	X	Y	Z	Refl.	DEN	Freq.	Lw	l/a	Optime	K0	Di	Adiv	Aatm	Agr	Afol	Ahours	Abar	Cmet	RL	Lr
	(m)	(m)	(m)			(Hz)	dB(A)	dB	dB	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)
3	17614993.70	4885131.89	16.11	0	D	63	57.3	6.5	0.0	0.0	0.0	46.7	0.0	-3.0	0.0	0.0	8.0	0.0	0.0	12.1
3	17614993.70	4885131.89	16.11	0	D	125	69.4	6.5	0.0	0.0	0.0	46.7	0.0	-1.3	0.0	0.0	6.5	0.0	0.0	24.0
3	17614993.70	4885131.89	16.11	0	D	250	73.9	6.5	0.0	0.0	0.0	46.7	0.1	1.0	0.0	0.0	4.5	0.0	0.0	28.1
3	17614993.70	4885131.89	16.11	0	D	500	79.3	6.5	0.0	0.0	0.0	46.7	0.1	0.3	0.0	0.0	6.0	0.0	0.0	32.8
3	17614993.70	4885131.89	16.11	0	D	1000	79.5	6.5	0.0	0.0	0.0	46.7	0.2	-1.3	0.0	0.0	8.6	0.0	0.0	31.8
3	17614993.70	4885131.89	16.11	0	D	2000	74.7	6.5	0.0	0.0	0.0	46.7	0.6	-1.6	0.0	0.0	10.5	0.0	0.0	25.1
3	17614993.70	4885131.89	16.11	0	D	4000	73.5	6.5	0.0	0.0	0.0	46.7	2.0	-1.6	0.0	0.0	12.5	0.0	0.0	20.4
3	17614993.70	4885131.89	16.11	0	D	8000	71.4	6.5	0.0	0.0	0.0	46.7	7.1	-1.6	0.0	0.0	15.0	0.0	0.0	10.7
3	17614993.70	4885131.89	16.11	0	N	63	57.3	6.5	-3.0	0.0	0.0	46.7	0.0	-3.0	0.0	0.0	8.0	0.0	0.0	9.1
3	17614993.70	4885131.89	16.11	0	N	125	69.4	6.5	-3.0	0.0	0.0	46.7	0.0	-1.3	0.0	0.0	6.5	0.0	0.0	21.0
3	17614993.70	4885131.89	16.11	0	N	250	73.9	6.5	-3.0	0.0	0.0	46.7	0.1	1.0	0.0	0.0	4.5	0.0	0.0	25.1
3	17614993.70	4885131.89	16.11	0	N	500	79.3	6.5	-3.0	0.0	0.0	46.7	0.1	0.3	0.0	0.0	6.0	0.0	0.0	29.8
3	17614993.70	4885131.89	16.11	0	N	1000	79.5	6.5	-3.0	0.0	0.0	46.7	0.2	-1.3	0.0	0.0	8.6	0.0	0.0	28.8
3	17614993.70	4885131.89	16.11	0	N	2000	74.7	6.5	-3.0	0.0	0.0	46.7	0.6	-1.6	0.0	0.0	10.5	0.0	0.0	22.0
3	17614993.70	4885131.89	16.11	0	N	4000	73.5	6.5	-3.0	0.0	0.0	46.7	2.0	-1.6	0.0	0.0	12.5	0.0	0.0	17.4
3	17614993.70	4885131.89	16.11	0	N	8000	71.4	6.5	-3.0	0.0	0.0	46.7	7.1	-1.6	0.0	0.0	15.0	0.0	0.0	7.7
3	17614993.70	4885131.89	16.11	0	E	63	57.3	6.5	0.0	0.0	0.0	46.7	0.0	-3.0	0.0	0.0	8.0	0.0	0.0	12.1
3	17614993.70	4885131.89	16.11	0	E	125	69.4	6.5	0.0	0.0	0.0	46.7	0.0	-1.3	0.0	0.0	6.5	0.0	0.0	24.0
3	17614993.70	4885131.89	16.11	0	E	250	73.9	6.5	0.0	0.0	0.0	46.7	0.1	1.0	0.0	0.0	4.5	0.0	0.0	28.1
3	17614993.70	4885131.89	16.11	0	E	500	79.3	6.5	0.0	0.0	0.0	46.7	0.1	0.3	0.0	0.0	6.0	0.0	0.0	32.8
3	17614993.70	4885131.89	16.11	0	E	1000	79.5	6.5	0.0	0.0	0.0	46.7	0.2	-1.3	0.0	0.0	8.6	0.0	0.0	31.8
3	17614993.70	4885131.89	16.11	0	E	2000	74.7	6.5	0.0	0.0	0.0	46.7	0.6	-1.6	0.0	0.0	10.5	0.0	0.0	25.1
3	17614993.70	4885131.89	16.11	0	E	4000	73.5	6.5	0.0	0.0	0.0	46.7	2.0	-1.6	0.0	0.0	12.5	0.0	0.0	20.4
3	17614993.70	4885131.89	16.11	0	E	8000	71.4	6.5	0.0	0.0	0.0	46.7	7.1	-1.6	0.0	0.0	15.0	0.0	0.0	10.7
4	17614994.64	4885133.04	16.11	0	D	63	57.3	6.5	0.0	0.0	0.0	46.8	0.0	-3.0	0.0	0.0	8.0	0.0	0.0	11.9
4	17614994.64	4885133.04	16.11	0	D	125	69.4	6.5	0.0	0.0	0.0	46.8	0.0	-1.2	0.0	0.0	6.5	0.0	0.0	23.8
4	17614994.64	4885133.04	16.11	0	D	250	73.9	6.5	0.0	0.0	0.0	46.8	0.1	1.3	0.0	0.0	4.4	0.0	0.0	27.8
4	17614994.64	4885133.04	16.11	0	D	500	79.3	6.5	0.0	0.0	0.0	46.8	0.1	0.5	0.0	0.0	6.0	0.0	0.0	32.3
4	17614994.64	4885133.04	16.11	0	D	1000	79.5	6.5	0.0	0.0	0.0	46.8	0.2	-1.3	0.0	0.0	9.0	0.0	0.0	31.2
4	17614994.64	4885133.04	16.11	0	D	2000	74.7	6.5	0.0	0.0	0.0	46.8	0.6	-1.5	0.0	0.0	11.0	0.0	0.0	24.3
4	17614994.64	4885133.04	16.11	0	D	4000	73.5	6.5	0.0	0.0	0.0	46.8	2.0	-1.5	0.0	0.0	13.2	0.0	0.0	19.5
4	17614994.64	4885133.04	16.11	0	D	8000	71.4	6.5	0.0	0.0	0.0	46.8	7.2	-1.5	0.0	0.0	15.8	0.0	0.0	9.6
4	17614994.64	4885133.04	16.11	0	N	63	57.3	6.5	-3.0	0.0	0.0	46.8	0.0	-3.0	0.0	0.0	8.0	0.0	0.0	8.9
4	17614994.64	4885133.04	16.11	0	N	125	69.4	6.5	-3.0	0.0	0.0	46.8	0.0	-1.2	0.0	0.0	6.5	0.0	0.0	20.8
4	17614994.64	4885133.04	16.11	0	N	250	73.9	6.5	-3.0	0.0	0.0	46.8	0.1	1.3	0.0	0.0	4.4	0.0	0.0	24.8
4	17614994.64	4885133.04	16.11	0	N	500	79.3	6.5	-3.0	0.0	0.0	46.8	0.1	0.5	0.0	0.0	6.0	0.0	0.0	29.3
4	17614994.64	4885133.04	16.11	0	N	1000	79.5	6.5	-3.0	0.0	0.0	46.8	0.2	-1.3	0.0	0.0	9.0	0.0	0.0	28.2
4	17614994.64	4885133.04	16.11	0	N	2000	74.7	6.5	-3.0	0.0	0.0	46.8	0.6	-1.5	0.0	0.0	11.0	0.0	0.0	21.3
4	17614994.64	4885133.04	16.11	0	N	4000	73.5	6.5	-3.0	0.0	0.0	46.8	2.0	-1.5	0.0	0.0	13.2	0.0	0.0	16.5
4	17614994.64	4885133.04	16.11	0	N	8000	71.4	6.5	-3.0	0.0	0.0	46.8	7.2	-1.5	0.0	0.0	15.8	0.0	0.0	6.6
4	17614994.64	4885133.04	16.11	0	E	63	57.3	6.5	0.0	0.0	0.0	46.8	0.0	-3.0	0.0	0.0	8.0	0.0	0.0	11.9
4	17614994.64	4885133.04	16.11	0	E	125	69.4	6.5	0.0	0.0	0.0	46.8	0.0	-1.2	0.0	0.0	6.5	0.0	0.0	23.8
4	17614994.64	4885133.04	16.11	0	E	250	73.9	6.5	0.0	0.0	0.0	46.8	0.1	1.3	0.0	0.0	4.4	0.0	0.0	27.8
4	17614994.64	4885133.04	16.11	0	E	500	79.3	6.5	0.0	0.0	0.0	46.8	0.1	0.5	0.0	0.0	6.0	0.0	0.0	32.3
4	17614994.64	4885133.04	16.11	0	E	1000	79.5	6.5	0.0	0.0	0.0	46.8	0.2	-1.3	0.0	0.0	9.0	0.0	0.0	31.2
4	17614994.64	4885133.04	16.11	0	E	2000	74.7	6.5	0.0	0.0	0.0	46.8	0.6	-1.5	0.0	0.0	11.0	0.0	0.0	24.3
4	17614994.64	4885133.04	16.11	0	E	4000	73.5	6.5	0.0	0.0	0.0	46.8	2.0	-1.5	0.0	0.0	13.2	0.0	0.0	19.5
4	17614994.64	4885133.04	16.11	0	E	8000	71.4	6.5	0.0	0.0	0.0	46.8	7.2	-1.5	0.0	0.0	15.8	0.0	0.0	9.6

Area Source, ISO 9613, Name: "Daikin Energy Recovery Unit", ID: "PE_ERU"																				
Nr.	X	Y	Z	Refl.	DEN	Freq.	Lw	l/a	Optime	K0	Di	Adiv	Aatm	Agr	Afol	Ahours	Abar	Cmet	RL	Lr
	(m)	(m)	(m)			(Hz)	dB(A)	dB	dB	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)
5	17614976.57	4885133.99	15.45	0	D	63	-40.2	11.1	0.0	0.0	0.0	47.4	0.0	-3.0	0.0	0.0	4.3	0.0	0.0	-77.8
5	17614976.57	4885133.99	15.45	0	D	125	60.9	11.1	0.0	0.0	0.0	47.4	0.0	-1.4	0.0	0.0	4.1	0.0	0.0	21.8
5	17614976.57	4885133.99	15.45	0	D	250	65.4	11.1	0.0	0.0	0.0	47.4	0.1	0.9	0.0	0.0	3.1	0.0	0.0	25.0
5	17614976.57	4885133.99	15.45	0	D	500	68.8	11.1	0.0	0.0	0.0	47.4	0.1	0.2	0.0	0.0	4.2	0.0	0.0	27.9
5	17614976.57	4885133.99	15.45	0	D	1000	72.0	11.1	0.0	0.0	0.0	47.4	0.2	-1.4	0.0	0.0	6.3	0.0	0.0	30.6
5	17614976.57	4885133.99	15.45	0	D	2000	68.2	11.1	0.0	0.0	0.0	47.4	0.6	-1.7	0.0	0.0	7.3	0.0	0.0	25.6
5	17614976.57	4885133.99	15.45	0	D	4000	66.0	11.1	0.0	0.0	0.0	47.4	2.2	-1.7	0.0	0.0	8.4	0.0	0.0	20.7
5	17614976.57	4885133.99	15.45	0	D	8000	62.9	11.1	0.0	0.0	0.0	47.4	7.7	-1.7	0.0	0.0	10.0	0.0	0.0	10.5
5	17614976.57	4885133.99	15.45	0	N	63	-40.2	11.1	0.0	0.0	0.0	47.4	0.0	-3.0	0.0	0.0	4.3	0.0	0.0	-77.8
5	17614976.57	4885133.99	15.45	0	N	125	60.9	11.1	0.0	0.0	0.0	47.4	0.0	-1.4	0.0	0.0	4.1	0.0	0.0	21.8
5	17614976.57	4885133.99	15.45	0	N	250	65.4	11.1	0.0	0.0	0.0	47.4	0.1	0.9	0.0	0.0	3.1	0.0	0.0	25.0

Area Source, ISO 9613, Name: "Daikin Energy Recovery Unit", ID: "PE_ERU"																				
Nr.	X	Y	Z	Refl.	DEN	Freq.	Lw	l/a	Optime	K0	Di	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	Lr
	(m)	(m)	(m)			(Hz)	dB(A)	dB	dB	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)
5	17614976.57	4885133.99	15.45	0	N	500	68.8	11.1	0.0	0.0	0.0	47.4	0.1	0.2	0.0	0.0	4.2	0.0	0.0	27.9
5	17614976.57	4885133.99	15.45	0	N	1000	72.0	11.1	0.0	0.0	0.0	47.4	0.2	-1.4	0.0	0.0	6.3	0.0	0.0	30.6
5	17614976.57	4885133.99	15.45	0	N	2000	68.2	11.1	0.0	0.0	0.0	47.4	0.6	-1.7	0.0	0.0	7.3	0.0	0.0	25.6
5	17614976.57	4885133.99	15.45	0	N	4000	66.0	11.1	0.0	0.0	0.0	47.4	2.2	-1.7	0.0	0.0	8.4	0.0	0.0	20.7
5	17614976.57	4885133.99	15.45	0	N	8000	62.9	11.1	0.0	0.0	0.0	47.4	7.7	-1.7	0.0	0.0	10.0	0.0	0.0	10.5
5	17614976.57	4885133.99	15.45	0	E	63	-40.2	11.1	0.0	0.0	0.0	47.4	0.0	-3.0	0.0	0.0	4.3	0.0	0.0	-77.8
5	17614976.57	4885133.99	15.45	0	E	125	60.9	11.1	0.0	0.0	0.0	47.4	0.0	-1.4	0.0	0.0	4.1	0.0	0.0	21.8
5	17614976.57	4885133.99	15.45	0	E	250	65.4	11.1	0.0	0.0	0.0	47.4	0.1	0.9	0.0	0.0	3.1	0.0	0.0	25.0
5	17614976.57	4885133.99	15.45	0	E	500	68.8	11.1	0.0	0.0	0.0	47.4	0.1	0.2	0.0	0.0	4.2	0.0	0.0	27.9
5	17614976.57	4885133.99	15.45	0	E	1000	72.0	11.1	0.0	0.0	0.0	47.4	0.2	-1.4	0.0	0.0	6.3	0.0	0.0	30.6
5	17614976.57	4885133.99	15.45	0	E	2000	68.2	11.1	0.0	0.0	0.0	47.4	0.6	-1.7	0.0	0.0	7.3	0.0	0.0	25.6
5	17614976.57	4885133.99	15.45	0	E	4000	66.0	11.1	0.0	0.0	0.0	47.4	2.2	-1.7	0.0	0.0	8.4	0.0	0.0	20.7
5	17614976.57	4885133.99	15.45	0	E	8000	62.9	11.1	0.0	0.0	0.0	47.4	7.7	-1.7	0.0	0.0	10.0	0.0	0.0	10.5
6	17614976.13	4885137.47	15.45	0	D	63	-40.2	11.0	0.0	0.0	0.0	47.8	0.0	-3.0	0.0	0.0	8.0	0.0	0.0	-82.1
6	17614976.13	4885137.47	15.45	0	D	125	60.9	11.0	0.0	0.0	0.0	47.8	0.0	-1.3	0.0	0.0	6.5	0.0	0.0	18.8
6	17614976.13	4885137.47	15.45	0	D	250	65.4	11.0	0.0	0.0	0.0	47.8	0.1	1.3	0.0	0.0	4.3	0.0	0.0	22.8
6	17614976.13	4885137.47	15.45	0	D	500	68.8	11.0	0.0	0.0	0.0	47.8	0.1	0.5	0.0	0.0	5.9	0.0	0.0	25.5
6	17614976.13	4885137.47	15.45	0	D	1000	72.0	11.0	0.0	0.0	0.0	47.8	0.3	-1.3	0.0	0.0	8.8	0.0	0.0	27.4
6	17614976.13	4885137.47	15.45	0	D	2000	68.2	11.0	0.0	0.0	0.0	47.8	0.7	-1.6	0.0	0.0	10.7	0.0	0.0	21.5
6	17614976.13	4885137.47	15.45	0	D	4000	66.0	11.0	0.0	0.0	0.0	47.8	2.3	-1.6	0.0	0.0	12.9	0.0	0.0	15.6
6	17614976.13	4885137.47	15.45	0	D	8000	62.9	11.0	0.0	0.0	0.0	47.8	8.1	-1.6	0.0	0.0	15.4	0.0	0.0	4.2
6	17614976.13	4885137.47	15.45	0	N	63	-40.2	11.0	0.0	0.0	0.0	47.8	0.0	-3.0	0.0	0.0	8.0	0.0	0.0	-82.1
6	17614976.13	4885137.47	15.45	0	N	125	60.9	11.0	0.0	0.0	0.0	47.8	0.0	-1.3	0.0	0.0	6.5	0.0	0.0	18.8
6	17614976.13	4885137.47	15.45	0	N	250	65.4	11.0	0.0	0.0	0.0	47.8	0.1	1.3	0.0	0.0	4.3	0.0	0.0	22.8
6	17614976.13	4885137.47	15.45	0	N	500	68.8	11.0	0.0	0.0	0.0	47.8	0.1	0.5	0.0	0.0	5.9	0.0	0.0	25.5
6	17614976.13	4885137.47	15.45	0	N	1000	72.0	11.0	0.0	0.0	0.0	47.8	0.3	-1.3	0.0	0.0	8.8	0.0	0.0	27.4
6	17614976.13	4885137.47	15.45	0	N	2000	68.2	11.0	0.0	0.0	0.0	47.8	0.7	-1.6	0.0	0.0	10.7	0.0	0.0	21.5
6	17614976.13	4885137.47	15.45	0	N	4000	66.0	11.0	0.0	0.0	0.0	47.8	2.3	-1.6	0.0	0.0	12.9	0.0	0.0	15.6
6	17614976.13	4885137.47	15.45	0	N	8000	62.9	11.0	0.0	0.0	0.0	47.8	8.1	-1.6	0.0	0.0	15.4	0.0	0.0	4.2
6	17614976.13	4885137.47	15.45	0	E	63	-40.2	11.0	0.0	0.0	0.0	47.8	0.0	-3.0	0.0	0.0	8.0	0.0	0.0	-82.1
6	17614976.13	4885137.47	15.45	0	E	125	60.9	11.0	0.0	0.0	0.0	47.8	0.0	-1.3	0.0	0.0	6.5	0.0	0.0	18.8
6	17614976.13	4885137.47	15.45	0	E	250	65.4	11.0	0.0	0.0	0.0	47.8	0.1	1.3	0.0	0.0	4.3	0.0	0.0	22.8
6	17614976.13	4885137.47	15.45	0	E	500	68.8	11.0	0.0	0.0	0.0	47.8	0.1	0.5	0.0	0.0	5.9	0.0	0.0	25.5
6	17614976.13	4885137.47	15.45	0	E	1000	72.0	11.0	0.0	0.0	0.0	47.8	0.3	-1.3	0.0	0.0	8.8	0.0	0.0	27.4
6	17614976.13	4885137.47	15.45	0	E	2000	68.2	11.0	0.0	0.0	0.0	47.8	0.7	-1.6	0.0	0.0	10.7	0.0	0.0	21.5
6	17614976.13	4885137.47	15.45	0	E	4000	66.0	11.0	0.0	0.0	0.0	47.8	2.3	-1.6	0.0	0.0	12.9	0.0	0.0	15.6
6	17614976.13	4885137.47	15.45	0	E	8000	62.9	11.0	0.0	0.0	0.0	47.8	8.1	-1.6	0.0	0.0	15.4	0.0	0.0	4.2

Receiver  
 Name: (untitled)  
 ID: PE\_OPOR  
 X: 17614997.40 m  
 Y: 4885073.04 m  
 Z: 1.50 m

Area Source, ISO 9613, Name: "Daikin Energy Recovery Unit", ID: "PE_ERU"																				
Nr.	X (m)	Y (m)	Z (m)	Refl.	DEN	Freq. (Hz)	Lw dB(A)	l/a dB	Optime dB	K0 (dB)	Di (dB)	Adiv (dB)	Aatm (dB)	Agr (dB)	Afol (dB)	Ahous (dB)	Abar (dB)	Cmet (dB)	RL (dB)	Lr dB(A)
1	17614976.57	4885133.99	15.45	0	D	63	-40.2	11.1	0.0	0.0	0.0	47.4	0.0	-3.0	0.0	0.0	4.3	0.0	0.0	-77.8
1	17614976.57	4885133.99	15.45	0	D	125	60.9	11.1	0.0	0.0	0.0	47.4	0.0	-1.4	0.0	0.0	4.1	0.0	0.0	21.8
1	17614976.57	4885133.99	15.45	0	D	250	65.4	11.1	0.0	0.0	0.0	47.4	0.1	0.9	0.0	0.0	3.1	0.0	0.0	25.0
1	17614976.57	4885133.99	15.45	0	D	500	68.8	11.1	0.0	0.0	0.0	47.4	0.1	0.2	0.0	0.0	4.2	0.0	0.0	27.9
1	17614976.57	4885133.99	15.45	0	D	1000	72.0	11.1	0.0	0.0	0.0	47.4	0.2	-1.4	0.0	0.0	6.3	0.0	0.0	30.6
1	17614976.57	4885133.99	15.45	0	D	2000	68.2	11.1	0.0	0.0	0.0	47.4	0.6	-1.7	0.0	0.0	7.3	0.0	0.0	25.6
1	17614976.57	4885133.99	15.45	0	D	4000	66.0	11.1	0.0	0.0	0.0	47.4	2.2	-1.7	0.0	0.0	8.4	0.0	0.0	20.7
1	17614976.57	4885133.99	15.45	0	D	8000	62.9	11.1	0.0	0.0	0.0	47.4	7.7	-1.7	0.0	0.0	10.0	0.0	0.0	10.5
1	17614976.57	4885133.99	15.45	0	N	63	-40.2	11.1	0.0	0.0	0.0	47.4	0.0	-3.0	0.0	0.0	4.3	0.0	0.0	-77.8
1	17614976.57	4885133.99	15.45	0	N	125	60.9	11.1	0.0	0.0	0.0	47.4	0.0	-1.4	0.0	0.0	4.1	0.0	0.0	21.8
1	17614976.57	4885133.99	15.45	0	N	250	65.4	11.1	0.0	0.0	0.0	47.4	0.1	0.9	0.0	0.0	3.1	0.0	0.0	25.0
1	17614976.57	4885133.99	15.45	0	N	500	68.8	11.1	0.0	0.0	0.0	47.4	0.1	0.2	0.0	0.0	4.2	0.0	0.0	27.9
1	17614976.57	4885133.99	15.45	0	N	1000	72.0	11.1	0.0	0.0	0.0	47.4	0.2	-1.4	0.0	0.0	6.3	0.0	0.0	30.6
1	17614976.57	4885133.99	15.45	0	N	2000	68.2	11.1	0.0	0.0	0.0	47.4	0.6	-1.7	0.0	0.0	7.3	0.0	0.0	25.6
1	17614976.57	4885133.99	15.45	0	N	4000	66.0	11.1	0.0	0.0	0.0	47.4	2.2	-1.7	0.0	0.0	8.4	0.0	0.0	20.7
1	17614976.57	4885133.99	15.45	0	N	8000	62.9	11.1	0.0	0.0	0.0	47.4	7.7	-1.7	0.0	0.0	10.0	0.0	0.0	10.5
1	17614976.57	4885133.99	15.45	0	E	63	-40.2	11.1	0.0	0.0	0.0	47.4	0.0	-3.0	0.0	0.0	4.3	0.0	0.0	-77.8
1	17614976.57	4885133.99	15.45	0	E	125	60.9	11.1	0.0	0.0	0.0	47.4	0.0	-1.4	0.0	0.0	4.1	0.0	0.0	21.8
1	17614976.57	4885133.99	15.45	0	E	250	65.4	11.1	0.0	0.0	0.0	47.4	0.1	0.9	0.0	0.0	3.1	0.0	0.0	25.0
1	17614976.57	4885133.99	15.45	0	E	500	68.8	11.1	0.0	0.0	0.0	47.4	0.1	0.2	0.0	0.0	4.2	0.0	0.0	27.9
1	17614976.57	4885133.99	15.45	0	E	1000	72.0	11.1	0.0	0.0	0.0	47.4	0.2	-1.4	0.0	0.0	6.3	0.0	0.0	30.6
1	17614976.57	4885133.99	15.45	0	E	2000	68.2	11.1	0.0	0.0	0.0	47.4	0.6	-1.7	0.0	0.0	7.3	0.0	0.0	25.6
1	17614976.57	4885133.99	15.45	0	E	4000	66.0	11.1	0.0	0.0	0.0	47.4	2.2	-1.7	0.0	0.0	8.4	0.0	0.0	20.7
1	17614976.57	4885133.99	15.45	0	E	8000	62.9	11.1	0.0	0.0	0.0	47.4	7.7	-1.7	0.0	0.0	10.0	0.0	0.0	10.5
2	17614976.13	4885137.47	15.45	0	D	63	-40.2	11.0	0.0	0.0	0.0	47.8	0.0	-3.0	0.0	0.0	8.0	0.0	0.0	-82.1
2	17614976.13	4885137.47	15.45	0	D	125	60.9	11.0	0.0	0.0	0.0	47.8	0.0	-1.3	0.0	0.0	6.5	0.0	0.0	18.8
2	17614976.13	4885137.47	15.45	0	D	250	65.4	11.0	0.0	0.0	0.0	47.8	0.1	1.3	0.0	0.0	4.3	0.0	0.0	22.8
2	17614976.13	4885137.47	15.45	0	D	500	68.8	11.0	0.0	0.0	0.0	47.8	0.1	0.5	0.0	0.0	5.9	0.0	0.0	25.5
2	17614976.13	4885137.47	15.45	0	D	1000	72.0	11.0	0.0	0.0	0.0	47.8	0.3	-1.3	0.0	0.0	8.8	0.0	0.0	27.4
2	17614976.13	4885137.47	15.45	0	D	2000	68.2	11.0	0.0	0.0	0.0	47.8	0.7	-1.6	0.0	0.0	10.7	0.0	0.0	21.5
2	17614976.13	4885137.47	15.45	0	D	4000	66.0	11.0	0.0	0.0	0.0	47.8	2.3	-1.6	0.0	0.0	12.9	0.0	0.0	15.6
2	17614976.13	4885137.47	15.45	0	D	8000	62.9	11.0	0.0	0.0	0.0	47.8	8.1	-1.6	0.0	0.0	15.4	0.0	0.0	4.2
2	17614976.13	4885137.47	15.45	0	N	63	-40.2	11.0	0.0	0.0	0.0	47.8	0.0	-3.0	0.0	0.0	8.0	0.0	0.0	-82.1
2	17614976.13	4885137.47	15.45	0	N	125	60.9	11.0	0.0	0.0	0.0	47.8	0.0	-1.3	0.0	0.0	6.5	0.0	0.0	18.8
2	17614976.13	4885137.47	15.45	0	N	250	65.4	11.0	0.0	0.0	0.0	47.8	0.1	1.3	0.0	0.0	4.3	0.0	0.0	22.8
2	17614976.13	4885137.47	15.45	0	N	500	68.8	11.0	0.0	0.0	0.0	47.8	0.1	0.5	0.0	0.0	5.9	0.0	0.0	25.5
2	17614976.13	4885137.47	15.45	0	N	1000	72.0	11.0	0.0	0.0	0.0	47.8	0.3	-1.3	0.0	0.0	8.8	0.0	0.0	27.4
2	17614976.13	4885137.47	15.45	0	N	2000	68.2	11.0	0.0	0.0	0.0	47.8	0.7	-1.6	0.0	0.0	10.7	0.0	0.0	21.5
2	17614976.13	4885137.47	15.45	0	N	4000	66.0	11.0	0.0	0.0	0.0	47.8	2.3	-1.6	0.0	0.0	12.9	0.0	0.0	15.6
2	17614976.13	4885137.47	15.45	0	N	8000	62.9	11.0	0.0	0.0	0.0	47.8	8.1	-1.6	0.0	0.0	15.4	0.0	0.0	4.2
2	17614976.13	4885137.47	15.45	0	E	63	-40.2	11.0	0.0	0.0	0.0	47.8	0.0	-3.0	0.0	0.0	8.0	0.0	0.0	-82.1
2	17614976.13	4885137.47	15.45	0	E	125	60.9	11.0	0.0	0.0	0.0	47.8	0.0	-1.3	0.0	0.0	6.5	0.0	0.0	18.8
2	17614976.13	4885137.47	15.45	0	E	250	65.4	11.0	0.0	0.0	0.0	47.8	0.1	1.3	0.0	0.0	4.3	0.0	0.0	22.8
2	17614976.13	4885137.47	15.45	0	E	500	68.8	11.0	0.0	0.0	0.0	47.8	0.1	0.5	0.0	0.0	5.9	0.0	0.0	25.5
2	17614976.13	4885137.47	15.45	0	E	1000	72.0	11.0	0.0	0.0	0.0	47.8	0.3	-1.3	0.0	0.0	8.8	0.0	0.0	27.4
2	17614976.13	4885137.47	15.45	0	E	2000	68.2	11.0	0.0	0.0	0.0	47.8	0.7	-1.6	0.0	0.0	10.7	0.0	0.0	21.5
2	17614976.13	4885137.47	15.45	0	E	4000	66.0	11.0	0.0	0.0	0.0	47.8	2.3	-1.6	0.0	0.0	12.9	0.0	0.0	15.6
2	17614976.13	4885137.47	15.45	0	E	8000	62.9	11.0	0.0	0.0	0.0	47.8	8.1	-1.6	0.0	0.0	15.4	0.0	0.0	4.2

Area Source, ISO 9613, Name: "Daikin Chiller", ID: "PE_C_2_Mit"																				
Nr.	X	Y	Z	Refl.	DEN	Freq.	Lw	l/a	Optime	K0	Di	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	Lr
	(m)	(m)	(m)			(Hz)	dB(A)	dB	dB	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)
3	17614996.74	4885123.83	16.11	0	D	63	54.3	6.5	0.0	0.0	0.0	45.5	0.0	-3.0	0.0	0.0	0.0	0.0	0.0	18.3
3	17614996.74	4885123.83	16.11	0	D	125	60.4	6.5	0.0	0.0	0.0	45.5	0.0	-1.1	0.0	0.0	0.0	0.0	0.0	22.5
3	17614996.74	4885123.83	16.11	0	D	250	67.9	6.5	0.0	0.0	0.0	45.5	0.1	1.2	0.0	0.0	0.0	0.0	0.0	27.7
3	17614996.74	4885123.83	16.11	0	D	500	73.3	6.5	0.0	0.0	0.0	45.5	0.1	0.5	0.0	0.0	0.0	0.0	0.0	33.8
3	17614996.74	4885123.83	16.11	0	D	1000	73.5	6.5	0.0	0.0	0.0	45.5	0.2	-1.1	0.0	0.0	0.0	0.0	0.0	35.5
3	17614996.74	4885123.83	16.11	0	D	2000	71.7	6.5	0.0	0.0	0.0	45.5	0.5	-1.4	0.0	0.0	0.0	0.0	0.0	33.6
3	17614996.74	4885123.83	16.11	0	D	4000	69.5	6.5	0.0	0.0	0.0	45.5	1.7	-1.4	0.0	0.0	0.0	0.0	0.0	30.2
3	17614996.74	4885123.83	16.11	0	D	8000	60.4	6.5	0.0	0.0	0.0	45.5	6.2	-1.4	0.0	0.0	0.0	0.0	0.0	16.6
3	17614996.74	4885123.83	16.11	0	N	63	54.3	6.5	-3.0	0.0	0.0	45.5	0.0	-3.0	0.0	0.0	0.0	0.0	0.0	15.3
3	17614996.74	4885123.83	16.11	0	N	125	60.4	6.5	-3.0	0.0	0.0	45.5	0.0	-1.1	0.0	0.0	0.0	0.0	0.0	19.5
3	17614996.74	4885123.83	16.11	0	N	250	67.9	6.5	-3.0	0.0	0.0	45.5	0.1	1.2	0.0	0.0	0.0	0.0	0.0	24.6
3	17614996.74	4885123.83	16.11	0	N	500	73.3	6.5	-3.0	0.0	0.0	45.5	0.1	0.5	0.0	0.0	0.0	0.0	0.0	30.8
3	17614996.74	4885123.83	16.11	0	N	1000	73.5	6.5	-3.0	0.0	0.0	45.5	0.2	-1.1	0.0	0.0	0.0	0.0	0.0	32.4
3	17614996.74	4885123.83	16.11	0	N	2000	71.7	6.5	-3.0	0.0	0.0	45.5	0.5	-1.4	0.0	0.0	0.0	0.0	0.0	30.6
3	17614996.74	4885123.83	16.11	0	N	4000	69.5	6.5	-3.0	0.0	0.0	45.5	1.7	-1.4	0.0	0.0	0.0	0.0	0.0	27.2
3	17614996.74	4885123.83	16.11	0	N	8000	60.4	6.5	-3.0	0.0	0.0	45.5	6.2	-1.4	0.0	0.0	0.0	0.0	0.0	13.6
3	17614996.74	4885123.83	16.11	0	E	63	54.3	6.5	0.0	0.0	0.0	45.5	0.0	-3.0	0.0	0.0	0.0	0.0	0.0	18.3
3	17614996.74	4885123.83	16.11	0	E	125	60.4	6.5	0.0	0.0	0.0	45.5	0.0	-1.1	0.0	0.0	0.0	0.0	0.0	22.5
3	17614996.74	4885123.83	16.11	0	E	250	67.9	6.5	0.0	0.0	0.0	45.5	0.1	1.2	0.0	0.0	0.0	0.0	0.0	27.7
3	17614996.74	4885123.83	16.11	0	E	500	73.3	6.5	0.0	0.0	0.0	45.5	0.1	0.5	0.0	0.0	0.0	0.0	0.0	33.8
3	17614996.74	4885123.83	16.11	0	E	1000	73.5	6.5	0.0	0.0	0.0	45.5	0.2	-1.1	0.0	0.0	0.0	0.0	0.0	35.5
3	17614996.74	4885123.83	16.11	0	E	2000	71.7	6.5	0.0	0.0	0.0	45.5	0.5	-1.4	0.0	0.0	0.0	0.0	0.0	33.6
3	17614996.74	4885123.83	16.11	0	E	4000	69.5	6.5	0.0	0.0	0.0	45.5	1.7	-1.4	0.0	0.0	0.0	0.0	0.0	30.2
3	17614996.74	4885123.83	16.11	0	E	8000	60.4	6.5	0.0	0.0	0.0	45.5	6.2	-1.4	0.0	0.0	0.0	0.0	0.0	16.6
4	17614997.68	4885124.99	16.11	0	D	63	54.3	6.5	0.0	0.0	0.0	45.6	0.0	-3.0	0.0	0.0	0.0	0.0	0.0	18.1
4	17614997.68	4885124.99	16.11	0	D	125	60.4	6.5	0.0	0.0	0.0	45.6	0.0	-1.1	0.0	0.0	0.0	0.0	0.0	22.3
4	17614997.68	4885124.99	16.11	0	D	250	67.9	6.5	0.0	0.0	0.0	45.6	0.1	1.2	0.0	0.0	0.0	0.0	0.0	27.4
4	17614997.68	4885124.99	16.11	0	D	500	73.3	6.5	0.0	0.0	0.0	45.6	0.1	0.5	0.0	0.0	0.0	0.0	0.0	33.6
4	17614997.68	4885124.99	16.11	0	D	1000	73.5	6.5	0.0	0.0	0.0	45.6	0.2	-1.1	0.0	0.0	0.0	0.0	0.0	35.3
4	17614997.68	4885124.99	16.11	0	D	2000	71.7	6.5	0.0	0.0	0.0	45.6	0.5	-1.4	0.0	0.0	0.0	0.0	0.0	33.4
4	17614997.68	4885124.99	16.11	0	D	4000	69.5	6.5	0.0	0.0	0.0	45.6	1.8	-1.4	0.0	0.0	0.0	0.0	0.0	30.0
4	17614997.68	4885124.99	16.11	0	D	8000	60.4	6.5	0.0	0.0	0.0	45.6	6.3	-1.4	0.0	0.0	0.0	0.0	0.0	16.3
4	17614997.68	4885124.99	16.11	0	N	63	54.3	6.5	-3.0	0.0	0.0	45.6	0.0	-3.0	0.0	0.0	0.0	0.0	0.0	15.1
4	17614997.68	4885124.99	16.11	0	N	125	60.4	6.5	-3.0	0.0	0.0	45.6	0.0	-1.1	0.0	0.0	0.0	0.0	0.0	19.3
4	17614997.68	4885124.99	16.11	0	N	250	67.9	6.5	-3.0	0.0	0.0	45.6	0.1	1.2	0.0	0.0	0.0	0.0	0.0	24.4
4	17614997.68	4885124.99	16.11	0	N	500	73.3	6.5	-3.0	0.0	0.0	45.6	0.1	0.5	0.0	0.0	0.0	0.0	0.0	30.6
4	17614997.68	4885124.99	16.11	0	N	1000	73.5	6.5	-3.0	0.0	0.0	45.6	0.2	-1.1	0.0	0.0	0.0	0.0	0.0	32.3
4	17614997.68	4885124.99	16.11	0	N	2000	71.7	6.5	-3.0	0.0	0.0	45.6	0.5	-1.4	0.0	0.0	0.0	0.0	0.0	30.4
4	17614997.68	4885124.99	16.11	0	N	4000	69.5	6.5	-3.0	0.0	0.0	45.6	1.8	-1.4	0.0	0.0	0.0	0.0	0.0	26.9
4	17614997.68	4885124.99	16.11	0	N	8000	60.4	6.5	-3.0	0.0	0.0	45.6	6.3	-1.4	0.0	0.0	0.0	0.0	0.0	13.3
4	17614997.68	4885124.99	16.11	0	E	63	54.3	6.5	0.0	0.0	0.0	45.6	0.0	-3.0	0.0	0.0	0.0	0.0	0.0	18.1
4	17614997.68	4885124.99	16.11	0	E	125	60.4	6.5	0.0	0.0	0.0	45.6	0.0	-1.1	0.0	0.0	0.0	0.0	0.0	22.3
4	17614997.68	4885124.99	16.11	0	E	250	67.9	6.5	0.0	0.0	0.0	45.6	0.1	1.2	0.0	0.0	0.0	0.0	0.0	27.4
4	17614997.68	4885124.99	16.11	0	E	500	73.3	6.5	0.0	0.0	0.0	45.6	0.1	0.5	0.0	0.0	0.0	0.0	0.0	33.6
4	17614997.68	4885124.99	16.11	0	E	1000	73.5	6.5	0.0	0.0	0.0	45.6	0.2	-1.1	0.0	0.0	0.0	0.0	0.0	35.3
4	17614997.68	4885124.99	16.11	0	E	2000	71.7	6.5	0.0	0.0	0.0	45.6	0.5	-1.4	0.0	0.0	0.0	0.0	0.0	33.4
4	17614997.68	4885124.99	16.11	0	E	4000	69.5	6.5	0.0	0.0	0.0	45.6	1.8	-1.4	0.0	0.0	0.0	0.0	0.0	30.0
4	17614997.68	4885124.99	16.11	0	E	8000	60.4	6.5	0.0	0.0	0.0	45.6	6.3	-1.4	0.0	0.0	0.0	0.0	0.0	16.3

Area Source, ISO 9613, Name: "Daikin Chiller", ID: "PE_C_1_Mit"																				
Nr.	X	Y	Z	Refl.	DEN	Freq.	Lw	l/a	Optime	K0	Di	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	Lr
	(m)	(m)	(m)			(Hz)	dB(A)	dB	dB	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)
5	17614993.70	4885131.89	16.11	0	D	63	54.3	6.5	0.0	0.0	0.0	46.7	0.0	-3.0	0.0	0.0	8.0	0.0	0.0	9.1
5	17614993.70	4885131.89	16.11	0	D	125	60.4	6.5	0.0	0.0	0.0	46.7	0.0	-1.3	0.0	0.0	6.5	0.0	0.0	15.0
5	17614993.70	4885131.89	16.11	0	D	250	67.9	6.5	0.0	0.0	0.0	46.7	0.1	1.0	0.0	0.0	4.5	0.0	0.0	22.1
5	17614993.70	4885131.89	16.11	0	D	500	73.3	6.5	0.0	0.0	0.0	46.7	0.1	0.3	0.0	0.0	6.0	0.0	0.0	26.8
5	17614993.70	4885131.89	16.11	0	D	1000	73.5	6.5	0.0	0.0	0.0	46.7	0.2	-1.3	0.0	0.0	8.6	0.0	0.0	25.8
5	17614993.70	4885131.89	16.11	0	D	2000	71.7	6.5	0.0	0.0	0.0	46.7	0.6	-1.6	0.0	0.0	10.5	0.0	0.0	22.1
5	17614993.70	4885131.89	16.11	0	D	4000	69.5	6.5	0.0	0.0	0.0	46.7	2.0	-1.6	0.0	0.0	12.5	0.0	0.0	16.4
5	17614993.70	4885131.89	16.11	0	D	8000	60.4	6.5	0.0	0.0	0.0	46.7	7.1	-1.6	0.0	0.0	15.0	0.0	0.0	-0.3
5	17614993.70	4885131.89	16.11	0	N	63	54.3	6.5	-3.0	0.0	0.0	46.7	0.0	-3.0	0.0	0.0	8.0	0.0	0.0	6.1
5	17614993.70	4885131.89	16.11	0	N	125	60.4	6.5	-3.0	0.0	0.0	46.7	0.0	-1.3	0.0	0.0	6.5	0.0	0.0	12.0
5	17614993.70	4885131.89	16.11	0	N	250	67.9	6.5	-3.0	0.0	0.0	46.7	0.1	1.0	0.0	0.0	4.5	0.0	0.0	19.1

Area Source, ISO 9613, Name: "Daikin Chiller", ID: "PE_C_1_Mit"																				
Nr.	X	Y	Z	Ref.	DEN	Freq.	Lw	l/a	Optime	K0	Di	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	Lr
	(m)	(m)	(m)			(Hz)	dB(A)	dB	dB	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)
5	17614993.70	4885131.89	16.11	0	N	500	73.3	6.5	-3.0	0.0	0.0	46.7	0.1	0.3	0.0	0.0	6.0	0.0	0.0	23.8
5	17614993.70	4885131.89	16.11	0	N	1000	73.5	6.5	-3.0	0.0	0.0	46.7	0.2	-1.3	0.0	0.0	8.6	0.0	0.0	22.8
5	17614993.70	4885131.89	16.11	0	N	2000	71.7	6.5	-3.0	0.0	0.0	46.7	0.6	-1.6	0.0	0.0	10.5	0.0	0.0	19.0
5	17614993.70	4885131.89	16.11	0	N	4000	69.5	6.5	-3.0	0.0	0.0	46.7	2.0	-1.6	0.0	0.0	12.5	0.0	0.0	13.4
5	17614993.70	4885131.89	16.11	0	N	8000	60.4	6.5	-3.0	0.0	0.0	46.7	7.1	-1.6	0.0	0.0	15.0	0.0	0.0	-3.3
5	17614993.70	4885131.89	16.11	0	E	63	54.3	6.5	0.0	0.0	0.0	46.7	0.0	-3.0	0.0	0.0	8.0	0.0	0.0	9.1
5	17614993.70	4885131.89	16.11	0	E	125	60.4	6.5	0.0	0.0	0.0	46.7	0.0	-1.3	0.0	0.0	6.5	0.0	0.0	15.0
5	17614993.70	4885131.89	16.11	0	E	250	67.9	6.5	0.0	0.0	0.0	46.7	0.1	1.0	0.0	0.0	4.5	0.0	0.0	22.1
5	17614993.70	4885131.89	16.11	0	E	500	73.3	6.5	0.0	0.0	0.0	46.7	0.1	0.3	0.0	0.0	6.0	0.0	0.0	26.8
5	17614993.70	4885131.89	16.11	0	E	1000	73.5	6.5	0.0	0.0	0.0	46.7	0.2	-1.3	0.0	0.0	8.6	0.0	0.0	25.8
5	17614993.70	4885131.89	16.11	0	E	2000	71.7	6.5	0.0	0.0	0.0	46.7	0.6	-1.6	0.0	0.0	10.5	0.0	0.0	22.1
5	17614993.70	4885131.89	16.11	0	E	4000	69.5	6.5	0.0	0.0	0.0	46.7	2.0	-1.6	0.0	0.0	12.5	0.0	0.0	16.4
5	17614993.70	4885131.89	16.11	0	E	8000	60.4	6.5	0.0	0.0	0.0	46.7	7.1	-1.6	0.0	0.0	15.0	0.0	0.0	-0.3
6	17614994.64	4885133.04	16.11	0	D	63	54.3	6.5	0.0	0.0	0.0	46.8	0.0	-3.0	0.0	0.0	8.0	0.0	0.0	8.9
6	17614994.64	4885133.04	16.11	0	D	125	60.4	6.5	0.0	0.0	0.0	46.8	0.0	-1.2	0.0	0.0	6.5	0.0	0.0	14.8
6	17614994.64	4885133.04	16.11	0	D	250	67.9	6.5	0.0	0.0	0.0	46.8	0.1	1.3	0.0	0.0	4.4	0.0	0.0	21.8
6	17614994.64	4885133.04	16.11	0	D	500	73.3	6.5	0.0	0.0	0.0	46.8	0.1	0.5	0.0	0.0	6.0	0.0	0.0	26.3
6	17614994.64	4885133.04	16.11	0	D	1000	73.5	6.5	0.0	0.0	0.0	46.8	0.2	-1.3	0.0	0.0	9.0	0.0	0.0	25.2
6	17614994.64	4885133.04	16.11	0	D	2000	71.7	6.5	0.0	0.0	0.0	46.8	0.6	-1.5	0.0	0.0	11.0	0.0	0.0	21.3
6	17614994.64	4885133.04	16.11	0	D	4000	69.5	6.5	0.0	0.0	0.0	46.8	2.0	-1.5	0.0	0.0	13.2	0.0	0.0	15.5
6	17614994.64	4885133.04	16.11	0	D	8000	60.4	6.5	0.0	0.0	0.0	46.8	7.2	-1.5	0.0	0.0	15.8	0.0	0.0	-1.4
6	17614994.64	4885133.04	16.11	0	N	63	54.3	6.5	-3.0	0.0	0.0	46.8	0.0	-3.0	0.0	0.0	8.0	0.0	0.0	5.9
6	17614994.64	4885133.04	16.11	0	N	125	60.4	6.5	-3.0	0.0	0.0	46.8	0.0	-1.2	0.0	0.0	6.5	0.0	0.0	11.8
6	17614994.64	4885133.04	16.11	0	N	250	67.9	6.5	-3.0	0.0	0.0	46.8	0.1	1.3	0.0	0.0	4.4	0.0	0.0	18.8
6	17614994.64	4885133.04	16.11	0	N	500	73.3	6.5	-3.0	0.0	0.0	46.8	0.1	0.5	0.0	0.0	6.0	0.0	0.0	23.3
6	17614994.64	4885133.04	16.11	0	N	1000	73.5	6.5	-3.0	0.0	0.0	46.8	0.2	-1.3	0.0	0.0	9.0	0.0	0.0	22.2
6	17614994.64	4885133.04	16.11	0	N	2000	71.7	6.5	-3.0	0.0	0.0	46.8	0.6	-1.5	0.0	0.0	11.0	0.0	0.0	18.3
6	17614994.64	4885133.04	16.11	0	N	4000	69.5	6.5	-3.0	0.0	0.0	46.8	2.0	-1.5	0.0	0.0	13.2	0.0	0.0	12.5
6	17614994.64	4885133.04	16.11	0	N	8000	60.4	6.5	-3.0	0.0	0.0	46.8	7.2	-1.5	0.0	0.0	15.8	0.0	0.0	-4.4
6	17614994.64	4885133.04	16.11	0	E	63	54.3	6.5	0.0	0.0	0.0	46.8	0.0	-3.0	0.0	0.0	8.0	0.0	0.0	8.9
6	17614994.64	4885133.04	16.11	0	E	125	60.4	6.5	0.0	0.0	0.0	46.8	0.0	-1.2	0.0	0.0	6.5	0.0	0.0	14.8
6	17614994.64	4885133.04	16.11	0	E	250	67.9	6.5	0.0	0.0	0.0	46.8	0.1	1.3	0.0	0.0	4.4	0.0	0.0	21.8
6	17614994.64	4885133.04	16.11	0	E	500	73.3	6.5	0.0	0.0	0.0	46.8	0.1	0.5	0.0	0.0	6.0	0.0	0.0	26.3
6	17614994.64	4885133.04	16.11	0	E	1000	73.5	6.5	0.0	0.0	0.0	46.8	0.2	-1.3	0.0	0.0	9.0	0.0	0.0	25.2
6	17614994.64	4885133.04	16.11	0	E	2000	71.7	6.5	0.0	0.0	0.0	46.8	0.6	-1.5	0.0	0.0	11.0	0.0	0.0	21.3
6	17614994.64	4885133.04	16.11	0	E	4000	69.5	6.5	0.0	0.0	0.0	46.8	2.0	-1.5	0.0	0.0	13.2	0.0	0.0	15.5
6	17614994.64	4885133.04	16.11	0	E	8000	60.4	6.5	0.0	0.0	0.0	46.8	7.2	-1.5	0.0	0.0	15.8	0.0	0.0	-1.4