

NOISE IMPACT STUDY

For

DAN8-BTS Development Site
232 NYS Route 30A
Town of Schoharie
Schoharie County, New York

August 4, 2025

Prepared For

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Noise Study

Introduction

The purpose of this report is to present the results of a sound study for the proposed DAN8 – BTS Development Site in the Town of Schoharie, Schoharie County New York. The study will demonstrate that the proposed DAN8 – BTS facility and its operations will not exceed the guidelines developed by the New York State Department of Environmental Conservation Program Policy “Assessing and Mitigating Noise Impacts”.

Noise Fundamentals

Human Response to Sound

Sound Pressure Level or perceived loudness is expressed in decibels (dB) or the A-weighted decibel scale expressed as dBA. The A-weighted decibel scale is weighted towards those portions of the frequency spectrum, between 20 and 20,000 Hertz, to which the human ear is most sensitive. The A-weighted scale is accepted by most regulating agencies, including the NYSDEC, as best representing the human response to sound. There are other weighting scales such as Z and C, however they are not applicable for this type of study.

Designations for sound levels may also be shown as L(10) or L(90) in a noise analysis. These designations refer to the sound pressure level (SPL) that is exceeded for 10% of the time over which the sound is measured, in the case of L(10), and 90% of the time, in the case of L(90). For example, an L(90) of 40 dBA means that 40 dBA is exceeded for 90% the time for which the measurement was taken.

Experimentation has determined that the frequency response of the human ear results in a perceived doubling of loudness with every 10 dB increase; whereas a 5 dB increase is a noticeable change, and a 3 dB increase is barely noticeable to most people. Sound levels above 85 dB are considered harmful, while 120 dB is unsafe and 150 dB causes physical damage to the human body. Windows break at approximately 163 dB. Jet airplanes create sound levels at approximately 133 dB at 100 feet, or 100 dB at approximately 500 feet. Eardrums rupture at 190 to 198 dB and sound levels of approximately 200 dB can cause death to humans and are generated near bomb explosions. Even louder are nuclear bombs, earthquakes, tornadoes, hurricanes and volcanoes, all capable of exceeding 240 dB.

Based on the NYSDEC Program Policy “Assessing and Mitigating Noise Impacts”, increases in sound pressure under 5 dBA are considered unnoticed or tolerable to human perception.

Another property of noise is the time varying pattern of the intensity of the noise. Since sound levels (and pressures) fluctuate, the equivalent sound level, L_{eq} , was developed to quantify the time varying pattern of noise by providing a single sound pressure level that represents hundreds and many times 1000's of samples taken over a specified period of time. From this sampling data, a single value of sound for the period measured is developed. This is useful in establishing ambient (background) sound levels (L_{90}) and to develop the equivalent sound pressure exposure over a period of time (L_{eq}). For example: a one (1) second exposure to an 90 dB sound will not likely result in hearing damage, but exposure to 90 dB over a continuous 8 hour period may result in permanent hearing damage.

In studying variable level environmental noise in accordance with the NYSDEC Noise Policy, the equivalent exposure time that may constitute a noise impact is 1-hour and is represented by the one-hour equivalent noise level or $L_{eq(1)}$. This is typically the measure as to which noise levels are evaluated when seeking the level from all sources in the sound environment acting as one.

Multiple Noise Sources

The total sound pressure created by multiple sound sources does not create a mathematical additive effect. For instance, two proximal noise sources that are 65 dBA each do not have a combined noise level of 130 dBA. In this case the combined noise level is 68 dBA. A mathematical formula used in noise studies to calculate the additive effect is:

Where L_T = combined noise level and $L_{1,2,...,n}$ = noise level in decibels the formula is:

$$L_T = 10 \log_{10}(10^{(L_1/10)} + 10^{(L_2/10)} + 10^{(L_3/10)} + \dots + 10^{(L_n/10)})$$

The following NYSDEC table provides a simplification of the mathematical equation by reducing the formula to a convenient method of adding decibels. These are to be used as a rule of thumb and will give a reasonable summation of multiple sound sources.

Table 1
Approximate Addition of Sound Levels

Difference Between Two Sound Levels	Add to the Higher of the Two Sound Levels
1 dB or less	3 dB
2 to 3 dB	2 dB
4 to 9 dB	1 dB
10 dB or more	0 dB

NYSDEC Program Policy "Assessing and Mitigating Noise Impacts".

If the difference between the two sound levels is 0 dB, the table tells us to add 3 dB to the higher of the two sound levels to compensate for the additive effects of the sound. For several sources of noise, present at the same time, The difference first between the two lowest sound pressure levels is calculated and that result is added to the next highest source. Follow this process until all the sound levels are accounted for.

As an example, if noise sources of 65 dBA, 67 dBA, 72 dBA and 74 dBA were to be added, the resultant sound level would be:

$$\begin{array}{lcl}
 65 \text{ dBA} + 67 \text{ dBA} = \mathbf{69 \text{ dBA}} & \Rightarrow & \mathbf{69 \text{ dBA}} + 72 \text{ dBA} = \mathbf{74 \text{ dBA}} & \Rightarrow & \mathbf{74 \text{ dBA}} + 74 \text{ dBA} = \mathbf{77 \text{ dBA}} \\
 \text{or} & \curvearrowright & 65 + 67 + 72 + 74 = 77 \text{ dBA}
 \end{array}$$

Sound Level Reduction Over Distance

It is important to have an understanding of the way noise decreases with distance. The decrease in sound level from any single noise source normally follows the “inverse square law.” That is, the sound pressure changes in inverse proportion to the square of the distance from the sound source. At distances greater than 50 feet from a sound source, every doubling of the distance produces a 6 dBA reduction in the sound for point sources such as air conditioners, compressors, a rock concert, or a rock crusher or HVAC units. Therefore, a sound level of 70 dBA at 50 feet would have a sound level of approximately 64 dBA at 100 feet. At 200 feet, sound from the same source would have a level of approximately 58 dBA. When dealing with a “line source”, such as moving traffic stream, the sound levels will decrease approximately 3 dBA over hard surfaces such as water, asphalt, or concrete and between 5 and 6 dBA per distance doubled over grass or other soft surfaces.

Common Noise Levels

Table 2 presents examples of typical noise levels in our environment.

Table 2
Common Noise Levels

Common Outdoor Noise Levels	Noise Level (dBA)			Common Indoor Noise Levels
Jet Fly over at 1000 Ft.	---	110	---	Rock Band
	---	100	---	Inside Subway Train (New York)
Gas Lawn Mower at 3 Ft.	---	90	---	Food Blender at 3 Ft.
Hyv Truck @ 50', (50 mph)	---	80	---	Garbage Disposal at 3 Ft.
Noisy Urban (Daytime)	---	70	---	Shouting at 3 Ft.
Gas Lawn mower at 100 Ft.	---	60	---	Vacuum Cleaner at 10 Ft.
Commercial Area	---	50	---	Normal Speech at 3 Ft.
Heavy Traffic Cat 300 Ft.	---	40	---	Large Business Office
Quiet Urban (Daytime)	---	30	---	Dishwasher Next Room
Quiet Urban (Nighttime)	---	20	---	Small Theatre (Background)
Quiet Suburban (Nighttime)	---	10	---	Library
	---	0	---	Bedroom at Night
Quiet Rural (Nighttime)	---		---	Concert Hall (Background)
	---		---	Broadcast and Recording Studio
	---		---	Threshold of Hearing

Measured Sound Levels

Sound level measurements were performed at multiple locations on November 15 and November 23, 2022 during morning, mid-morning, evening, and nighttime periods. Measurement locations are identified in Figure 1 and the results shown in Table 3. The measurement durations varied utilizing a time period that provided enough data to represent an equivalent 1-hour noise level $L_{eq(1)}$, L_{10} , and L_{90} levels. The time periods varied from 20 minutes to 40 minutes. The primary noise source in the area is traffic along NY Route 30A with Interstate 88 also contributing to the background noise levels.

Field measurements were obtained using a SoundPro DL-2-1/3 ANSI Type 2 (Serial Number BIJ090026) sound level meter. The meter is a battery-powered instrument, which was field tested for proper calibration before measurements were conducted. The instrument was set up approximately five (5) feet above the ground, at a 45 degree angle, with a wind screen attached to the microphone. The weather was overcast with the temperature between 20 and 36 degrees Fahrenheit. Wind was intermittent between 0 mph and 2 mph with the majority of the measurements occurring under zero wind conditions. Humidity levels were between 36% and 79%. These meteorological conditions are within the noise meters parameters for accurate operation as recommended by the manufacturer. The “A” weighting scale was utilized as this closely resembles human response to sounds and is consistent with the NYSDEC Policy. Data Sheets from the field measurements are included in Appendix E.

Sound level measurements are tabulated in Table 3 below.

Table 3
Measured Sound Levels

Location Number	Measurement Location	Primary Source(s) of Sound	Time	Date	Measured Sound Levels (dBA)
					L_{eq}
M1	Open Field 320' from Rt. 30A, 200' from nearest Residential Property Line	Traffic on Route 30A I-88 background	7:24 am to 7:58 am	11/15/22	59
			10:13 am to 11:16 am	11/15/22	55
			4:03 pm to 4:33 pm	11/15/22	55
			11:10 pm to 11:45 pm	11/23/22	50
M2	NY Route 30A Field Entrance 50' from Centerline of Route 30A	Traffic on Route 30A	8:10 am to 8:33 am	11/15/22	71
			11:20 am to 11:51 am	11/15/22	70
			4:36 pm to 5:12 pm	11/15/22	71
			9:40 pm to 10:16 pm	11/23/22	63
M3	NY Route 30A 50' from Centerline of Route 30A	Traffic on Route 30A	8:38 am to 9:06 am	11/15/22	67
			5:16 pm to 5:46 pm	11/15/22	70
			10:28 pm to 11:00 pm	11/23/22	60

Location Number	Measurement Location	Primary Source(s) of Sound	Time	Date	Measured Sound Levels (dBA)
					L _{eq}
M4	Park & Ride SW Corner EB I-88 Exit Ramp 200' from Rt. 30A	Traffic on I-88, Traffic on NY Route 30A	9:22 am to 9:58 am	11/15/22	61
			Vehicular traffic in Park & Ride, too close to meter, precipitation began 5:55 pm	11/15/22	NA
			9:03 pm to 9:35 pm	11/23/22	54

Noise Code / Policy

The Town does not have a specific noise ordinance. In discussions with the Town's Engineer on previous projects, it was agreed to utilize the NYSDEC Program Policy "Assessing and Mitigating Noise Impacts", which is consistent in most cases when a local policy is not in place. The NYSDEC policy provides guidance that utilizes the 1-hour equivalent noise level as the basis for potential impacts and mitigation. The 1-hour equivalent noise level is also utilized by NYSDOT and the Federal Highway Administration to quantify and assess potential noise impacts related to traffic and construction noise. The Town's zoning law will be considered as applicable. Based on the NYSDEC Program Policy "Assessing and Mitigating Noise Impacts", increases in sound pressure under 5 dBA are considered unnoticed or tolerable to human perception and is most often utilized as a guidance in determining potential impacts.

Projected Sound Levels

Traffic Volume Increases

The proposed project was modeled using the Federal Highway Administration Traffic Noise Model Version 3.2 (TNM). Traffic data from the July 15, 2025 Traffic Impact Study (TIS) for the project was utilized for Route 30A, the Interstate 88 ramps and ingress and egress traffic for the site and internal traffic volumes on the site. The NYSDOT Traffic data viewer was utilized for vehicle speeds, traffic volumes and vehicle classifications (passenger cars/two axle four tire vehicles, medium trucks and heavy trucks) along I-88 and for classifications along Route 30A and the I-88 ramps. Models were developed for the 2027 No-Build volumes and the 2027 Build Volumes. Based on the analysis, noise levels due to traffic will increase between 0 and 3 dBA in the project area resulting in no impacts. The results of the TNM modeled sound levels due to traffic at seven sensitive receptors as shown in Table 4 and Figure 1. TNM Input files are located in Appendix A and the TNM modeled Receptor Results are included in Appendix B.

Traffic Noise Model (TNM) - To assist with regulatory compliance related to noise impact determinations and noise abatement design, the Federal Highway Administration created the TNM software first released in 1998 with subsequent updates including version 3.2 in 2023. The software package analyzes noise considering traffic volumes, vehicle speeds, vehicle types, grass or pavement ground conditions, differences in elevation, berms, barriers, atmospheric conditions and many others. The software also accounts for changes in truck noise when

ascending and descending grades. The software has been highly refined using real data obtained from hundreds of actual field measurements. Additional Information on the software, TNM 3.2, can be found on the FHWA website.

Table 4
Comparison of Sound Levels Due to Traffic Changes

Sensitive Receptor Number	2027 No Build Modeled PM Leq dBA	2027 Build Modeled PM Leq dBA	Increase over 2027 No-Build PM Leq dBA	Notes
R7	65	66	+1	No Impact
R19	57	58	+1	No Impact
R20	60	62	+2	No Impact
R21	58	59	+1	No Impact
R25	60	61	+1	No Impact
R30	57	58	+1	No Impact
R37	57	59	+2	No Impact

Truck Backup Alarms

Truck backup alarms are required by New York State and the Occupational Safety and Health Administration (OSHA). The NYSDEC Program Policy does not provide a quantitative guideline on determining impacts and only describes the sound as annoying. In order to minimize sounds from backup alarms, the project will provide a sound barrier along a portion of the western driveway along the location where tractor trailers will be backing in trailers. The barrier analyzed is 10' high and provides the primary attenuation by cutting off the line of sight from the backup alarms to the nearest sensitive receptors. The backup alarm is assumed to be 36" above the ground and mounted to the frame of the tractor part of the tractor trailer combination. Backup alarms vary in levels from 97 dB on roadworthy vehicles to 112 dB on heavy construction equipment. Sound Power is the specification utilized for backup alarms since they operate in a narrow frequency band, typically 1000 Hz to 1200 Hz. Sound Power information was obtained from the acoustical software program CadnaA database as this information is not published as part of the specifications of investigated backup alarms. The Sound Power used in the analysis was 104.2 dB at an average frequency of 1100 Hz. Measurement locations are identified in Figure 2 and the results comparing the backup alarm levels to the 2027 Build and 2027 No-Build conditions are shown in Table 5.

Table 5
Backup Alarms Representative Levels

Location	Distance to Sensitive Receptor (Feet)	Traffic No Build PM Leq (dBA)	Traffic and Site Build PM Leq (dBA)	Backup Alarms (With Barrier) (45-90 seconds) @1100 Hz
A (R20)	310	60	62	43
B	380	59	60	39
C (R7)	530	65	66	42

At the residential locations A (R20), B, and C (R7) (See Figure 2), the proposed sound barrier at the truck backing area provides attenuation to reduce the sound levels from backup alarms by at least twenty decibels (A) (20 dBA) below the 2027 No-build and 2027 Build scenarios. The backing of vehicles is expected to be approximately four to five vehicles per hour (maximum) with a duration of 45 to 90 seconds or a maximum of 8 minutes an hour. The levels represent the worst case as they are calculated with the receptor location at the second story of representative residences approximately 14' above the ground elevation where an open window may be present. At ground level, the sound experienced by the backup alarm would be slightly lower.

Backup alarms for the delivery vehicles are the “white” noise type and traffic circulation on the site is such that these vehicles operate in a forward direction the vast majority of the time. Delivery vehicle operations where backing into spaces to park and when queued for being serviced, will take place on the northern and most eastern sections of the site. Sensitive receptors will be shielded from these areas by the proposed warehouse building that acts as a large sound barrier and other infrastructure on the site. Interstate 88 and NYS Route 30A background traffic noise dominates the sound landscape, and as such, the backup alarms from delivery vehicles will go unnoticed on the non-typical occasion they are activated.

Appendix C includes calculations that analyze the sound levels of the tractor trailer backup alarms over distance and the effect of the proposed mitigation (noise barrier) at the closest representative residences.

Rooftop HVAC Units

The primary sources of continuous operational sound are rooftop-mounted heating, ventilating, and air conditioning (HVAC) equipment. Eleven (11) standard design Trane Voyager 600 50-ton HVAC units (or similar) were assumed to be installed on the main building as a conservative assumption. According to the manufacturer, the reference sound pressure level of the 50 Ton Trane Unit is 58.9 dBA at a distance of 15.2 meters (50'). The size and number of the

HVAC units required for the main building was estimated based on the proposed 225,345 square feet of the warehouse building and a conservative 2 tons of HVAC capacity per 1000 square feet of space. Since the project is at the concept level of design, the actual mechanical equipment selected for the building may differ, but will not exceed the conservative levels utilized in this analysis. The sound generated from these units working simultaneously under full load conditions was evaluated to determine the resultant sound levels at the residential receptor expected to receive the highest combined sound levels due to HVAC units from the site (R7). The closest rooftop unit to receptor R7 is just over 450 feet. The units along the southern side of the rooftop (#7 through # 11) will be located behind the rooftop parapet wall. A conservative reduction in sound pressure of 3 dBA was deducted from just these units. It is likely the parapet wall will also provide attenuation for units #1 through #6, however, this was not incorporated into the analysis to be conservative. Using the inverse square law, the sound contribution from each unit was determined and the decibel levels were combined. A combined level of 47 dBA can be expected when each unit is operating at the same time at full capacity as shown in Table 6 below. HVAC levels at the other residential receptors will be lower than 47 dBA as they are further away from the units.

Table 6
Rooftop HVAC Level at R7

Unit ID See Figure 2	Rooftop Unit Distance to R7	dBA		Unit ID See Figure 2	Rooftop Unit Distance to R7	dBA
H1	613'	38.0		H7	776'	33.0
H2	625'	37.9		H8	657'	34.4
H3	677'	37.2		H9	540'	36.1
H4	772'	36.0		H10	475'	37.3
H5	878'	34.9		H11	451'	37.6
H6	926'	34.5				
					Combined	47 dBA

For this study, it is assumed that smaller residential style HVAC units or heat pumps will be installed on the ground or on/in a wall for accessory buildings and will not contribute more than 45 dBA at the nearest residential receptor (R36) which is 10 dBA below noise levels generated by traffic on Route 30A and Interstate 88. The result is no sound impact due to HVAC units. See Appendix D for HVAC Unit sound analysis.

Construction Noise

Construction noise differs from site developed noise in the following ways:

- Construction noise only lasts for the duration of the construction contract.
- Construction activities are usually limited to the daylight hours when most human activity takes place.
- Construction activities are generally short term.
- Construction noise is intermittent and depends on the type of operation.

Construction activities that may cause noise impacts include earthwork, paving, structure construction, land clearing, and blasting. Exact noise levels due to construction cannot be determined at specific sites since the number and types of construction equipment that would be used cannot be predicted.

Blasting will not be necessary.

Mitigation measures will be incorporated into the contract documents to reduce construction noise and perceived disturbances in the project area. For a project of this type the following example mitigation strategies are available:

- Public notification of construction operations.
- Methods to handle to complaints.
- Use of properly designed and well-maintained mufflers for all internal combustion engines, engine enclosures, and intake silencers and regular equipment maintenance.
- Use of new equipment subject to new product noise emission standards when feasible
- Placement of stationary equipment as far away as possible from particularly sensitive receptors.
- Strategic choice of waste disposal sites.
- Coordinate work operations to coincide with time periods when people would least likely be affected.
- Limit work hours to daytime.
- Elimination of "tail gate banging".

Conclusion

The data provided in this Study demonstrates that the A-weighted sound levels generated by the Project at the closest residential properties will not be the cause of sound impacts. Increases in traffic noise are expected to be between 0 and 3 dBA, HVAC rooftop units will be below existing background levels and backup alarms from tractor trailer combinations (18 wheelers) will be mitigated by a sound barrier where residential properties may be affected. Table 7 summarizes the combined noise levels at four (4) residential receptors adjacent to the proposed project site.

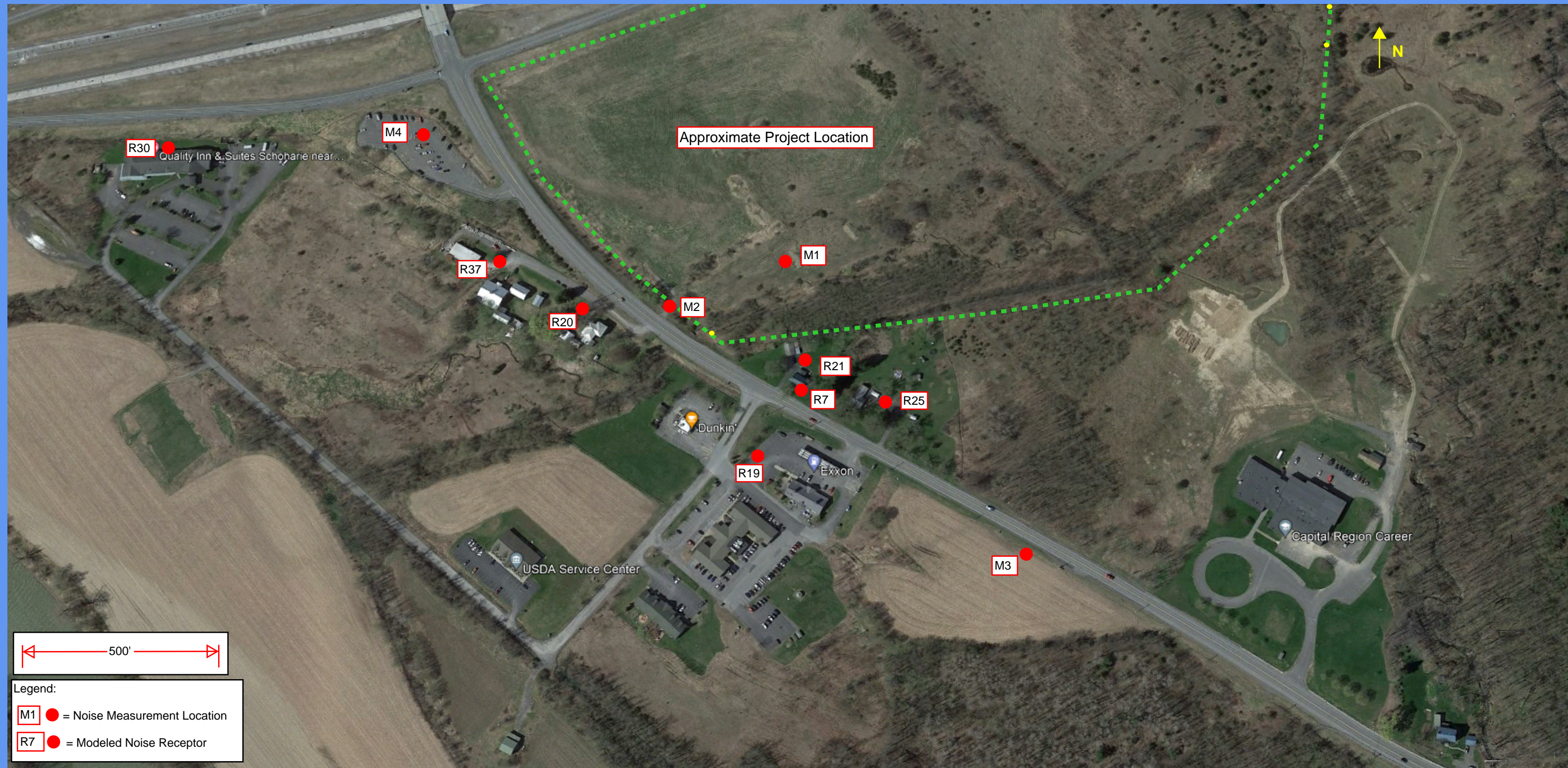
Table 7
Combined Levels at Sensitive Residences

Location	2027 No Build Leq (dBA)	2027 Build Leq (dBA)	Backup Alarm (dBA) (Intermittent)	HVAC (dBA)	Project Combined Noise Levels (dBA)	Increase over Existing (dBA)
R7	65	66	42	47	66	+1
R20	60	62	43	47	62	+2
R25	60	61	40	45	61	+1
R37	57	59	38	44	60	+3

Receptor R30 (hotel) will experience an increase of approximately 1 dBA during the 2027 Build condition due to traffic volume increases. See Table 4.

Commercial businesses along Route 30A (R19) may experience an increase of 1 to 2 dBA due to the project.

Based on the NYSDEC Program Policy “Assessing and Mitigating Noise Impacts”, increases in sound pressure under 5 dBA are considered unnoticed or tolerable to human perception. Based on the results and the NYSDEC guidance, and the mitigation measures proposed, the proposed project will not be the cause of a noise impact.

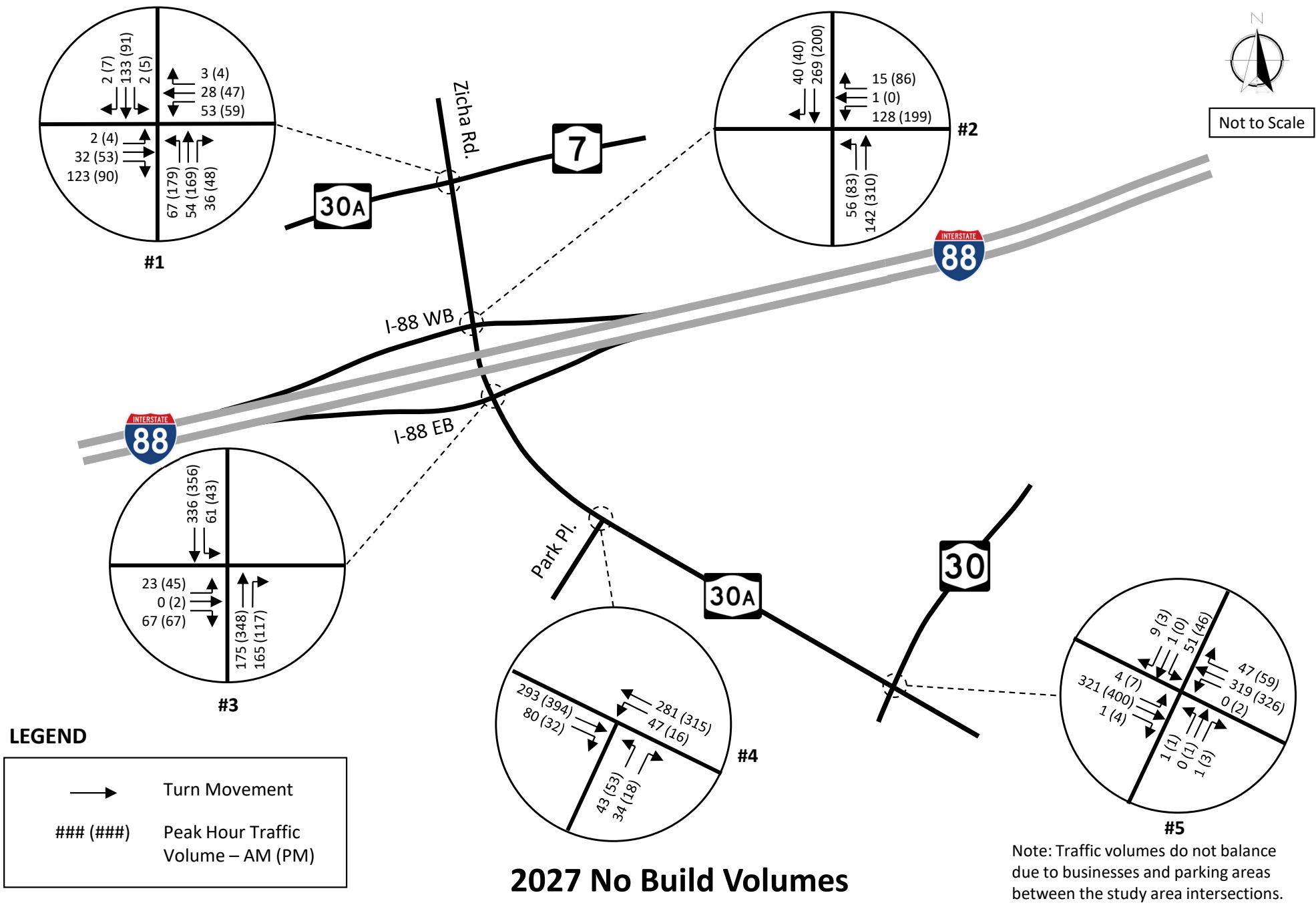




Appendix A

Traffic Volumes, Vehicle Classifications, Speeds and Roadways

- 2027 No-Build Figure 5 from 7/15/2025 TIS
- 2027 No-Build (TNM)
- 2027 Build Figure 13 from 7/15/2025 TIS
- 2027 Build (TNM)
- Roadway and Site TNM Schematic



REPORT:

INPUT TRAFFIC FOR TNM VEHICLES (LAeq)

TNM VERSION:

3.2.8741.34338

REPORT DATE:

25 July 2025

CALCULATED WITH:

TNM v3.2.8741.34338

CALCULATION DATE:

7/25/2025 3:00:37 PM

CASE:

No Build 2027 PM

ORGANIZATION:

Barton and Loguidice

ANALYSIS BY:

TCB

PROJECT/CONTRACT:

Amazon DAN8

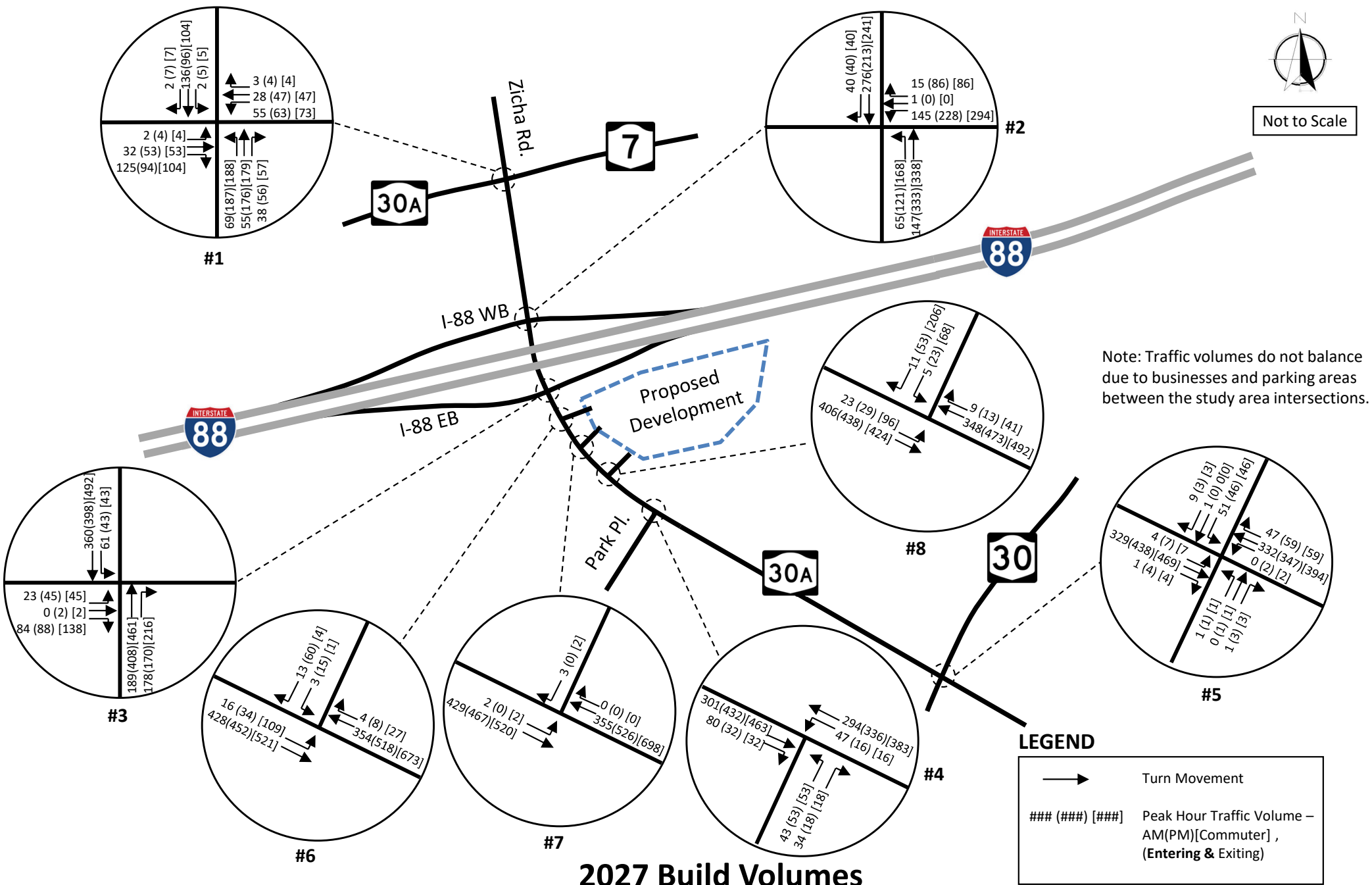
Roadway Name	Road Segment		Auto		Medium Truck		Heavy Truck		Bus		Motorcycle	
	Start Point		Volume	Speed	Volume	Speed	Volume	Speed	Volume	Speed	Volume	Speed
	Name	No.										
			[Veh/hr]	[mph]	[Veh/hr]	[mph]	[Veh/hr]	[mph]	[Veh/hr]	[mph]	[Veh/hr]	[mph]
Roadway16	point51	51	426	45	23	40	16	35	1	35	1	40
	point52	52	426	45	23	40	16	35	1	35	1	40
	point173	173	426	45	23	40	16	35	1	35	1	40
	point53	53	426	45	23	40	16	35	1	35	1	40
Roadway20	point63	63	390	35	21	35	15	35	1	35	1	35
	point64	64	390	35	21	35	15	35	1	35	1	35
	point65	65	390	35	21	35	15	35	1	35	1	35
	point66	66	390	35	21	35	15	35	1	35	1	35
Roadway23	point79	79	126	45	21	35	15	30	1	35	1	45
	point80	80	126	50	21	40	15	35	1	40	1	55
	point81	81	126	55	21	45	15	40	1	45	1	60
	point82	82	126	55	21	45	15	40	1	45	1	60
Roadway24	point83	83	444	70	27	70	64	65	1	70	1	75
	point101	101	444	70	27	70	64	65	1	70	1	75
	point100	100	444	70	27	70	64	65	1	70	1	75
	point84	84	444	70	27	70	64	65	1	70	1	75
	point169	169	444	70	27	70	64	65	1	70	1	75

Roadway Name	Road Segment		Auto		Medium Truck		Heavy Truck		Bus		Motorcycle	
			Volume	Speed	Volume	Speed	Volume	Speed	Volume	Speed	Volume	Speed
	Name	No.										
Roadway24	point168	168	444	70	27	70	64	65	1	70	1	75
	point85	85	444	70	27	70	64	65	1	70	1	75
Roadway27	point90	90	585	75	35	70	77	70	1	70	1	70
	point91	91	585	75	35	70	77	70	1	70	1	70
	point92	92	585	75	35	70	77	70	1	70	1	70
Roadway28	point102	102	96	20	16	20	11	15	1	20	1	25
	point103	103	96	40	16	35	11	30	1	36	1	45
	point104	104	96	45	16	35	11	30	1	35	1	45
	point105	105	96	50	16	50	11	45	1	50	1	55
	point106	106	96	60	16	55	11	50	1	55	1	65
	point107	107	96	65	16	55	11	50	1	55	1	65
	point108	108	96	65	16	55	11	50	1	55	1	65
	point109	109	96	65	16	55	11	50	1	55	1	65
	point110	110	96	65	16	55	11	50	1	55	1	65
	point111	111	96	65	16	55	11	50	1	55	1	65
Roadway29	point112	112	89	65	15	65	10	65	1	65	1	65
	point113	113	89	65	15	65	10	65	1	65	1	65
	point114	114	89	50	15	50	10	50	1	50	1	55
	point115	115	89	50	15	50	10	45	1	50	1	60
	point116	116	89	45	15	45	10	40	1	40	1	50
	point117	117	89	35	15	30	10	25	1	30	1	35
	point118	118	89	25	15	25	10	25	1	25	1	30
	point119	119	89	20	15	20	10	20	1	20	1	25
	point120	120	89	10	15	10	10	10	1	10	1	10
	point121	121	89	10	15	10	10	10	1	10	1	10

Roadway Name	Road Segment Start Point		Auto		Medium Truck		Heavy Truck		Bus		Motorcycle	
			Volume	Speed	Volume	Speed	Volume	Speed	Volume	Speed	Volume	Speed
	Name	No.										
				[Veh/hr]	[mph]	[Veh/hr]	[mph]	[Veh/hr]	[mph]	[Veh/hr]	[mph]	[Veh/hr]
Roadway27-2-2	point123	123	541	75	33	70	78	70	1	70	1	75
	point96	96	541	75	33	70	78	70	1	70	1	75
	point170	170	541	75	33	70	78	70	1	70	1	75
	point97	97	541	75	33	70	78	70	1	70	1	75
	point98	98	541	75	33	70	78	70	1	70	1	75
	point99	99	541	75	33	70	78	70	1	70	1	75
Roadway24-2	point124	124	444	75	27	70	64	70	1	70	1	75
	point86	86	444	75	27	70	64	70	1	70	1	75
	point87	87	444	75	27	70	64	70	1	70	1	75
	point88	88	444	75	27	70	64	70	1	70	1	75
	point89	89	444	75	27	70	64	70	1	70	1	75
Roadway33	point125	125	359	30	20	30	14	30	1	30	1	30
	point126	126	359	30	20	30	14	30	1	30	1	30
	point127	127	359	30	20	30	14	30	1	30	1	30
	point128	128	359	30	20	30	14	30	1	30	1	30
	point129	129	359	30	20	30	14	30	1	30	1	30
Roadway34	point130	130	222	65	37	60	26	55	1	55	1	65
	point131	131	222	55	37	50	26	50	1	50	1	65
	point132	132	222	45	37	40	26	35	1	40	1	65
	point133	133	222	40	37	35	26	30	1	35	1	65
	point134	134	222	35	37	30	26	25	1	30	1	65
	point135	135	222	15	37	15	26	10	1	10	1	15
	point136	136	222	15	37	15	26	10	1	10	1	15
Roadway39	point154	154	365	30	20	30	14	30	1	30	1	30

Roadway Name	Road Segment Start Point		Auto		Medium Truck		Heavy Truck		Bus		Motorcycle	
			Volume	Speed	Volume	Speed	Volume	Speed	Volume	Speed	Volume	Speed
	Name	No.										
	[Veh/hr]	[mph]	[Veh/hr]	[mph]	[Veh/hr]	[mph]	[Veh/hr]	[mph]	[Veh/hr]	[mph]	[Veh/hr]	[mph]
Roadway39	point155	155	365	30	20	30	14	30	1	30	1	30
	point162	162	365	30	20	30	14	30	1	30	1	30
	point156	156	365	30	20	30	14	30	1	30	1	30
	point157	157	365	30	20	30	14	30	1	30	1	30
Roadway16-2	point174	174	426	50	23	45	16	45	1	45	1	50
	point54	54	426	50	23	45	16	45	1	45	1	50
	point55	55	426	50	23	45	16	45	1	45	1	50
	point56	56	426	50	23	45	16	45	1	45	1	50
Roadway20-2	point175	175	390	45	21	45	15	45	1	45	1	45
	point67	67	390	45	21	45	15	45	1	45	1	45
	point68	68	390	45	21	45	15	45	1	45	1	45
Roadway27-2	point176	176	585	70	35	70	77	70	1	70	1	70
	point93	93	585	70	35	70	77	70	1	70	1	70
	point171	171	585	70	35	70	77	70	1	70	1	70
	point94	94	585	70	35	70	77	70	1	70	1	70
Roadway45	point177	177	44	20	3	20	1	15	0	0	0	0
	point178	178	44	20	3	20	1	15	0	0	0	0
Roadway46	point179	179	65	20	4	20	2	15	0	0	0	0
	point180	180	65	20	4	20	2	15	0	0	0	0
Roadway22-2-2	point184	184	376	51	21	51	14	51	1	51	1	51
	point74	74	376	51	21	51	14	51	1	51	1	51
	point75	75	376	51	21	51	14	51	1	51	1	51
	point76	76	376	51	21	51	14	51	1	51	1	51
	point77	77	376	51	21	51	14	51	1	51	1	51

Roadway Name	Road Segment Start Point		Auto		Medium Truck		Heavy Truck		Bus		Motorcycle	
	Name	No.	Volume	Speed	Volume	Speed	Volume	Speed	Volume	Speed	Volume	Speed
			[Veh/hr]	[mph]	[Veh/hr]	[mph]	[Veh/hr]	[mph]	[Veh/hr]	[mph]	[Veh/hr]	[mph]
Roadway15-2-2	point186	186	426	45	23	30	16	35	1	45	1	50
	point50	50	426	45	23	30	16	35	1	45	1	50
Roadway15-2-Roadway15	point47	47	302	51	17	51	12	51	1	51	1	51
	point78	78	302	51	17	51	12	51	1	51	1	51
	point62	62	302	51	17	51	12	51	1	51	1	51
	point181	181	302	51	17	51	12	51	1	51	1	51
	point49	49	302	51	17	51	12	51	1	51	1	51
Roadway22-2-Roadway22	point71	71	390	45	21	45	15	45	1	45	1	45
	point183	183	390	45	21	45	15	45	1	45	1	45
	point73	73	390	45	21	45	15	45	1	45	1	45



REPORT:

INPUT TRAFFIC FOR TNM VEHICLES (LAeq)

TNM VERSION:

3.2.8741.34338

REPORT DATE:

25 July 2025

CALCULATED WITH:

TNM v3.2.8741.34338

CALCULATION DATE:

7/25/2025 6:01:22 PM

CASE:

2027 PM Build with Commuter

ORGANIZATION:

Barton and Loguidice

ANALYSIS BY:

TCB

PROJECT/CONTRACT:

Amazon DAN8

Roadway Name	Road Segment		Auto		Medium Truck		Heavy Truck		Bus		Motorcycle	
	Start Point		Volume	Speed	Volume	Speed	Volume	Speed	Volume	Speed	Volume	Speed
	Name	No.										
			[Veh/hr]	[mph]	[Veh/hr]	[mph]	[Veh/hr]	[mph]	[Veh/hr]	[mph]	[Veh/hr]	[mph]
Roadway1	point43	0	272	15	1	15	1	15	0	0	0	0
	point1	1	272	15	1	15	1	15	0	0	0	0
Roadway6	point6	6	10	25	5	20	1	15	0	0	0	0
	point7	7	10	25	5	20	1	15	0	0	0	0
	point8	8	10	25	5	20	1	15	0	0	0	0
	point9	9	10	25	5	20	1	15	0	0	0	0
	point10	10	10	25	5	20	1	15	0	0	0	0
	point42	42	10	25	5	20	1	15	0	0	0	0
	point11	11	10	25	5	20	1	15	0	0	0	0
	point12	12	10	25	5	20	1	15	0	0	0	0
	point13	13	10	25	5	20	1	15	0	0	0	0
Roadway7	point14	14	75	20	10	15	0	0	0	0	0	0
	point15	15	75	20	10	15	0	0	0	0	0	0
	point16	16	75	20	10	15	0	0	0	0	0	0
	point17	17	75	20	10	15	0	0	0	0	0	0
	point18	18	75	20	10	15	0	0	0	0	0	0
Roadway8	point19	19	283	25	10	20	0	0	0	0	0	0

Roadway Name	Road Segment Start Point		Auto		Medium Truck		Heavy Truck		Bus		Motorcycle	
			Volume	Speed	Volume	Speed	Volume	Speed	Volume	Speed	Volume	Speed
	Name	No.										
			[Veh/hr]	[mph]	[Veh/hr]	[mph]	[Veh/hr]	[mph]	[Veh/hr]	[mph]	[Veh/hr]	[mph]
Roadway8	point20	20	283	25	10	20	0	0	0	0	0	0
	point21	21	283	25	10	20	0	0	0	0	0	0
	point22	22	283	25	10	20	0	0	0	0	0	0
	point23	23	283	25	10	20	0	0	0	0	0	0
	point24	24	283	25	10	20	0	0	0	0	0	0
	point25	25	283	25	10	20	0	0	0	0	0	0
	point26	26	283	25	10	20	0	0	0	0	0	0
Roadway9	point27	27	136	15	10	15	0	0	0	0	0	0
	point28	28	136	15	10	15	0	0	0	0	0	0
Roadway10	point29	2	60	20	76	15	5	20	0	0	0	0
	point30	3	60	20	76	15	5	20	0	0	0	0
	point31	4	60	20	76	15	5	20	0	0	0	0
	point32	5	60	20	76	15	5	20	0	0	0	0
	point172	29	60	20	76	15	5	20	0	0	0	0
Roadway11	point35	30	272	15	1	15	1	10	0	0	0	0
	point36	31	272	15	1	15	1	10	0	0	0	0
	point37	32	272	15	1	15	1	10	0	0	0	0
	point38	33	272	15	1	15	1	10	0	0	0	0
	point39	34	272	15	1	15	1	10	0	0	0	0
	point40	35	272	15	1	15	1	10	0	0	0	0
	point41	36	272	15	1	15	1	10	0	0	0	0
Roadway16	point51	51	639	45	35	40	24	35	1	35	1	40
	point52	52	639	45	35	40	24	35	1	35	1	40
	point173	173	639	45	35	40	24	35	1	35	1	40
	point53	53	639	45	35	40	24	35	1	35	1	40

Roadway Name	Road Segment Start Point		Auto		Medium Truck		Heavy Truck		Bus		Motorcycle	
			Volume	Speed	Volume	Speed	Volume	Speed	Volume	Speed	Volume	Speed
	Name	No.										
	[Veh/hr]	[mph]	[Veh/hr]	[mph]	[Veh/hr]	[mph]	[Veh/hr]	[mph]	[Veh/hr]	[mph]	[Veh/hr]	[mph]
Roadway20	point63	63	576	35	32	35	22	35	1	35	1	35
	point64	64	576	40	32	40	22	40	1	40	1	40
	point65	65	478	45	26	45	18	45	1	45	1	45
	point66	66	478	45	26	45	18	45	1	45	1	45
Roadway23	point79	79	203	45	34	35	24	30	1	35	1	45
	point80	80	203	50	34	40	24	35	1	40	1	55
	point81	81	203	55	34	45	24	40	1	45	1	60
	point82	82	203	55	34	45	24	40	1	45	1	60
Roadway24	point83	83	444	70	27	70	64	65	1	70	1	75
	point101	101	444	70	27	70	64	65	1	70	1	75
	point100	100	444	70	27	70	64	65	1	70	1	75
	point84	84	444	70	27	70	64	65	1	70	1	75
	point169	169	444	70	27	70	64	65	1	70	1	75
	point168	168	444	70	27	70	64	65	1	70	1	75
	point85	85	444	70	27	70	64	65	1	70	1	75
Roadway27	point90	90	585	75	35	70	77	70	1	70	1	70
	point91	91	585	75	35	70	77	70	1	70	1	70
	point92	92	585	75	35	70	77	70	1	70	1	70
Roadway28	point102	102	162	20	27	20	19	15	1	20	1	25
	point103	103	162	40	27	35	19	30	1	36	1	45
	point104	104	162	45	27	35	19	30	1	35	1	45
	point105	105	162	50	27	50	19	45	1	50	1	55
	point106	106	162	60	27	55	19	50	1	55	1	65
	point107	107	162	65	27	55	19	50	1	55	1	65
	point108	108	19	65	27	55	19	50	1	55	1	65

Roadway Name	Road Segment Start Point		Auto		Medium Truck		Heavy Truck		Bus		Motorcycle	
			Volume	Speed	Volume	Speed	Volume	Speed	Volume	Speed	Volume	Speed
	Name	No.										
Roadway28	point109	109	19	65	27	55	19	50	1	55	1	65
	point110	110	19	65	27	55	19	50	1	55	1	65
	point111	111	19	65	27	55	19	50	1	55	1	65
Roadway29	point112	112	144	65	24	65	17	65	1	65	1	65
	point113	113	144	65	24	65	17	65	1	65	1	65
	point114	114	144	50	24	50	17	50	1	50	1	55
	point115	115	144	50	24	50	17	45	1	50	1	60
	point116	116	144	45	24	45	17	40	1	40	1	50
	point117	117	144	35	24	30	17	25	1	30	1	35
	point118	118	144	25	24	25	17	25	1	25	1	30
	point119	119	144	20	24	20	17	20	1	20	1	25
	point120	120	144	10	24	10	17	10	1	10	1	10
	point121	121	144	10	24	10	17	10	1	10	1	10
Roadway27-2-2	point123	123	541	75	33	70	78	70	1	70	1	75
	point96	96	541	75	33	70	78	70	1	70	1	75
	point170	170	541	75	33	70	78	70	1	70	1	75
	point97	97	541	75	33	70	78	70	1	70	1	75
	point98	98	541	75	33	70	78	70	1	70	1	75
	point99	99	541	75	33	70	78	70	1	70	1	75
Roadway24-2	point124	124	444	75	27	70	64	70	1	70	1	75
	point86	86	444	75	27	70	64	70	1	70	1	75
	point87	87	444	75	27	70	64	70	1	70	1	75
	point88	88	444	75	27	70	64	70	1	70	1	75
	point89	89	444	75	27	70	64	70	1	70	1	75

Roadway Name	Road Segment Start Point		Auto		Medium Truck		Heavy Truck		Bus		Motorcycle	
			Volume	Speed	Volume	Speed	Volume	Speed	Volume	Speed	Volume	Speed
	Name	No.										
	[Veh/hr]	[mph]	[Veh/hr]	[mph]	[Veh/hr]	[mph]	[Veh/hr]	[mph]	[Veh/hr]	[mph]	[Veh/hr]	[mph]
Roadway33	point125	125	463	30	25	30	18	30	1	30	1	30
	point126	126	463	30	25	30	18	30	1	30	1	30
	point127	127	463	30	25	30	18	30	1	30	1	30
	point128	128	463	30	25	30	18	30	1	30	1	30
	point129	129	463	30	25	30	18	30	1	30	1	30
Roadway34	point130	130	297	65	49	60	34	55	1	55	1	65
	point131	131	297	55	49	50	34	50	1	50	1	65
	point132	132	297	45	49	40	34	35	1	40	1	65
	point133	133	297	40	49	35	34	30	1	35	1	65
	point134	134	297	35	49	30	34	25	1	30	1	65
	point135	135	297	15	49	15	34	10	1	10	1	15
	point136	136	297	15	49	15	34	10	1	10	1	15
Roadway39	point154	154	489	30	27	30	19	30	1	30	1	30
	point155	155	489	30	27	30	19	30	1	30	1	30
	point162	162	489	30	27	30	19	30	1	30	1	30
	point156	156	489	30	27	30	19	30	1	30	1	30
	point157	157	489	30	27	30	19	30	1	30	1	30
Roadway16-2	point174	174	640	50	35	45	25	45	1	45	1	50
	point54	54	619	50	34	45	24	45	1	45	1	50
	point55	55	619	50	34	45	24	45	1	45	1	50
	point56	56	619	50	34	45	24	45	1	45	1	50
Roadway20-2	point175	175	478	45	26	45	18	45	1	45	1	45
	point67	67	476	45	26	45	18	45	1	45	1	45
	point68	68	476	45	26	45	18	45	1	45	1	45
Roadway27-2	point176	176	585	70	35	70	77	70	1	70	1	70

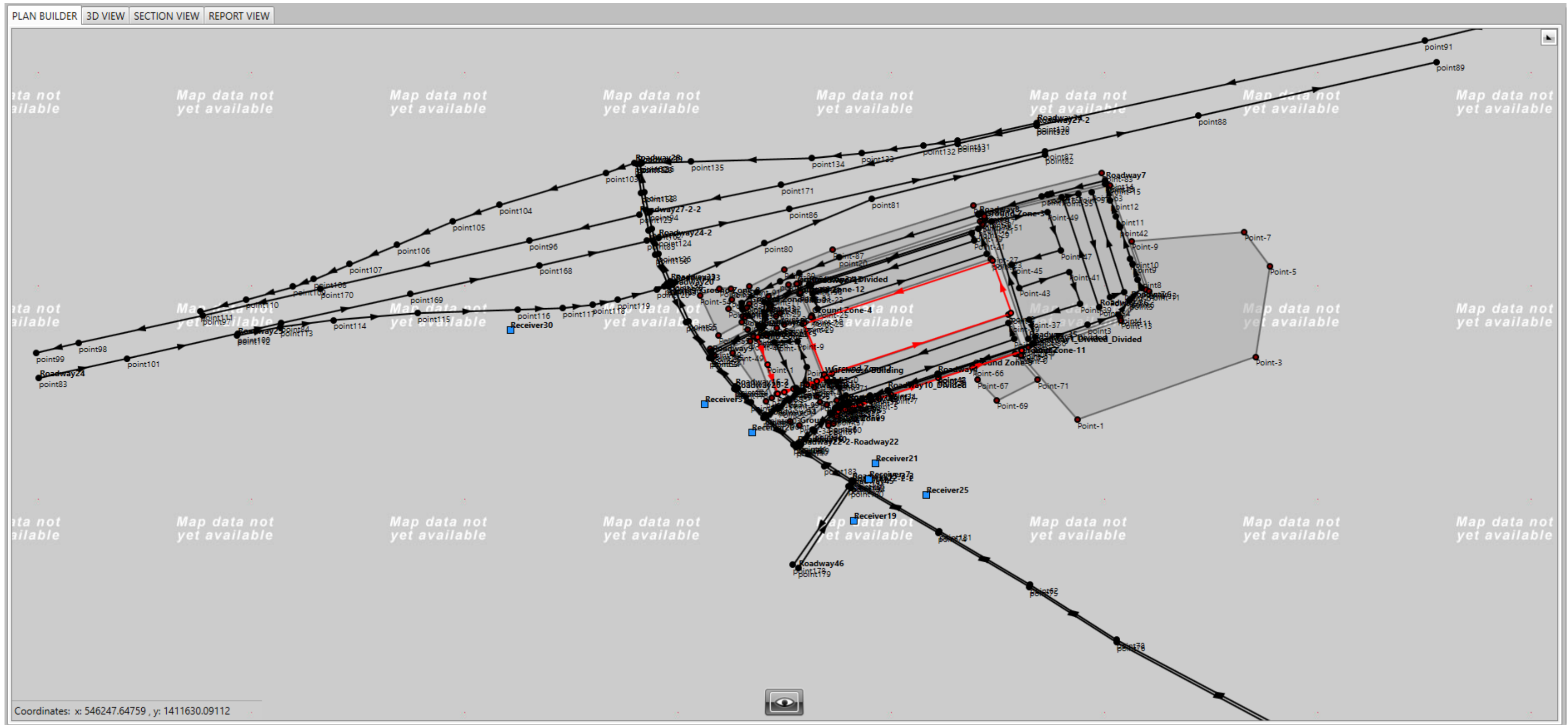
Roadway Name	Road Segment Start Point		Auto		Medium Truck		Heavy Truck		Bus		Motorcycle	
			Volume	Speed	Volume	Speed	Volume	Speed	Volume	Speed	Volume	Speed
	Name	No.										
	[Veh/hr]	[mph]	[Veh/hr]	[mph]	[Veh/hr]	[mph]	[Veh/hr]	[mph]	[Veh/hr]	[mph]	[Veh/hr]	[mph]
Roadway27-2	point93	93	585	70	35	70	77	70	1	70	1	70
	point171	171	585	70	35	70	77	70	1	70	1	70
	point94	94	585	70	35	70	77	70	1	70	1	70
Roadway45	point177	177	44	20	3	20	1	15	0	0	0	0
	point178	178	44	20	3	20	1	15	0	0	0	0
Roadway46	point179	179	65	20	4	20	2	15	0	0	0	0
	point180	180	65	20	4	20	2	15	0	0	0	0
Roadway22-2-2	point184	184	439	51	24	51	17	51	1	51	1	51
	point74	74	439	51	24	51	17	51	1	51	1	51
	point75	75	439	51	24	51	17	51	1	51	1	51
	point76	76	439	51	24	51	17	51	1	51	1	51
	point77	77	439	51	24	51	17	51	1	51	1	51
Roadway15-2-2	point186	186	487	45	27	30	19	35	1	45	1	50
	point50	50	487	45	27	30	19	35	1	45	1	50
Roadway15-2-Roadway15	point47	47	365	51	20	51	14	51	1	51	1	51
	point78	78	365	51	20	51	14	51	1	51	1	51
	point62	62	365	51	20	51	14	51	1	51	1	51
	point181	181	365	51	20	51	14	51	1	51	1	51
	point49	49	365	51	20	51	14	51	1	51	1	51
Roadway56	point193	37	137	20	10	20	0	0	0	0	0	0
	point192	44	137	20	10	20	0	0	0	0	0	0
	point191	45	137	20	10	20	0	0	0	0	0	0
Roadway57	point194	194	75	20	10	20	0	0	0	0	0	0
	point195	195	75	20	10	20	0	0	0	0	0	0

Roadway Name	Road Segment Start Point		Auto		Medium Truck		Heavy Truck		Bus		Motorcycle	
			Volume	Speed	Volume	Speed	Volume	Speed	Volume	Speed	Volume	Speed
	Name	No.										
				[Veh/hr]	[mph]	[Veh/hr]	[mph]	[Veh/hr]	[mph]	[Veh/hr]	[mph]	[Veh/hr]
Roadway22-2-Roadway22	point71	71	478	45	26	45	18	45	1	45	1	45
	point183	183	478	45	26	45	18	45	1	45	1	45
	point73	73	478	45	26	45	18	45	1	45	1	45
Roadway-34	Point-0	46	1	25	2	25	12	20	0	0	0	0
	Point-1	48	1	25	2	25	12	20	0	0	0	0
	Point-3	57	1	25	2	25	12	20	0	0	0	0
	Point-5	58	1	25	2	25	12	20	0	0	0	0
	Point-7	59	1	25	2	25	12	20	0	0	0	0
	Point-9	60	1	25	2	25	12	20	0	0	0	0
	Point-11	61	1	25	2	25	12	20	0	0	0	0
	Point-13	69	1	25	2	25	12	20	0	0	0	0
Roadway34	Point-18	38	137	20	10	20	0	0	0	0	0	0
	Point-19	39	137	20	10	20	0	0	0	0	0	0
	Point-21	40	137	20	10	20	0	0	0	0	0	0
	Point-23	43	137	20	10	20	0	0	0	0	0	0
	Point-25	70	137	20	10	20	0	0	0	0	0	0
	Point-27	72	137	20	10	20	0	0	0	0	0	0
	Point-29	95	137	20	10	20	0	0	0	0	0	0
	Point-31	122	137	20	10	20	0	0	0	0	0	0
Roadway-35	Point-53	41	272	10	1	10	1	10	0	0	0	0
	Point-51	137	272	10	1	10	1	10	0	0	0	0
	Point-49	138	272	10	1	10	1	10	0	0	0	0
	Point-47	139	272	10	1	10	1	10	0	0	0	0
	Point-45	140	272	10	1	10	1	10	0	0	0	0

Roadway Name	Road Segment Start Point		Auto		Medium Truck		Heavy Truck		Bus		Motorcycle	
			Volume	Speed	Volume	Speed	Volume	Speed	Volume	Speed	Volume	Speed
	Name	No.										
	[Veh/hr]	[mph]	[Veh/hr]	[mph]	[Veh/hr]	[mph]	[Veh/hr]	[mph]	[Veh/hr]	[mph]	[Veh/hr]	[mph]
Roadway-35	Point-43	141	272	10	1	10	1	10	0	0	0	0
	Point-41	142	272	10	1	10	1	10	0	0	0	0
	Point-39	143	272	10	1	10	1	10	0	0	0	0
	Point-37	144	272	10	1	10	1	10	0	0	0	0
	Point-36	145	272	10	1	10	1	10	0	0	0	0
Roadway-36	Point-54	216	75	15	10	10	0	0	0	0	0	0
	Point-55	217	75	15	10	10	0	0	0	0	0	0
	Point-57	218	75	15	10	10	0	0	0	0	0	0
	Point-59	219	75	15	10	10	0	0	0	0	0	0
	Point-61	220	75	15	10	10	0	0	0	0	0	0
	Point-63	221	75	15	10	10	0	0	0	0	0	0
Roadway-37	Point-64	146	60	15	76	15	0	0	0	0	0	0
	Point-65	147	60	15	76	15	0	0	0	0	0	0
	Point-67	148	60	15	76	15	0	0	0	0	0	0
	Point-69	149	60	15	76	15	0	0	0	0	0	0
	Point-71	150	60	15	76	15	0	0	0	0	0	0
	Point-73	151	60	15	76	15	0	0	0	0	0	0
	Point-75	152	60	15	76	15	0	0	0	0	0	0
Roadway-38	Point-98	243	1	25	2	25	8	20	0	0	0	0
	Point-99	244	1	25	2	25	8	20	0	0	0	0
	Point-101	245	1	25	2	25	8	20	0	0	0	0
	Point-103	246	1	25	2	25	8	20	0	0	0	0
Roadway34_Divided	Point-31	153	10	20	9	20	0	0	0	0	0	0
	Point-33	158	10	20	9	20	0	0	0	0	0	0

Roadway Name	Road Segment		Auto		Medium Truck		Heavy Truck		Bus		Motorcycle	
	Start Point		Volume	Speed	Volume	Speed	Volume	Speed	Volume	Speed	Volume	Speed
	Name	No.										
			[Veh/hr]	[mph]	[Veh/hr]	[mph]	[Veh/hr]	[mph]	[Veh/hr]	[mph]	[Veh/hr]	[mph]
Roadway34_Divided	Point-35	159	10	20	9	20	0	0	0	0	0	0
Roadway1_Divided	point2	160	272	15	1	15	1	15	0	0	0	0
	point43	161	272	15	1	15	1	15	0	0	0	0
Roadway10_Divided	point34	163	272	15	1	15	1	15	0	0	0	0
	point33	164	272	15	1	15	1	15	0	0	0	0
	point172	165	272	15	1	15	1	15	0	0	0	0
Roadway1_Divided_Divided	point2	166	270	25	8	25	0	0	0	0	0	0
	point3	167	270	25	8	25	0	0	0	0	0	0
	point4	172	270	25	8	25	0	0	0	0	0	0
	point5	182	270	25	8	25	0	0	0	0	0	0
Roadway-43	Point-0	185	10	20	5	15	0	0	0	0	0	0
	Point-1	191	10	20	5	15	0	0	0	0	0	0
	Point-3	192	10	20	5	15	0	0	0	0	0	0
	Point-5	193	10	20	5	15	0	0	0	0	0	0
	Point-7	196	10	20	5	15	0	0	0	0	0	0

TRAFFIC NOISE MODEL - 2027 BUILD CONDITION ROADWAY SCHEMATIC



Appendix B

TNM 3.2 Modeled Receptor Results

- Receptor Results – 2027 No-Build
- Receptor Results – 2027 Build

REPORT:

Results: Sound Levels - No Barrier Objects

TNM VERSION

3.2.8741.34338

REPORT DATE:

25 July 2025

CALCULATED WITH:

TNM v3.2.8741.34338

CALCULATION DATE:

7/25/2025 3:00:37 PM

CASE:

No Build 2027 PM

ORGANIZATION:

Barton and Loguidice

UNITS:

English

ANALYSIS BY:

TCB

DEFAULT GROUND TYPE:

FieldGrass

PROJECT/CONTRACT

Amazon DAN8

ATMOSPHERICS:

68°F, 50%

Average pavement type shall be used unless a state

PAVEMENT TYPE(S) USED:

Average

highway agency substantiates the use of a different

type with approval FHWA.

Receiver				Modeled Traffic Noise Levels					
Name	No.	Nb. R.R.	Existing LAeq dBA						
				LAeq		Increase over Existing		Type of Impact	
				Calc.	Absolute Criterion	Calc.	Relative Criterion		
				dBA	dBA	dBA	dBA		
Receiver19	0	0	---	57.4	66.0	---	---	None	
Receiver20	0	0	---	60.2	66.0	---	---	None	
Receiver21	0	0	---	58.1	66.0	---	---	None	
Receiver25	0	0	---	59.7	66.0	---	---	None	
Receiver30	0	0	---	56.8	66.0	---	---	None	
Receiver37	0	0	---	56.8	66.0	---	---	None	
Receiver-7	0	0	---	65.4	0.0	---	---	Sound Level	

REPORT:

Results: Sound Levels - No Barrier Objects

TNM VERSION

3.2.8741.34338

REPORT DATE:

25 July 2025

CALCULATED WITH:

TNM v3.2.8741.34338

CALCULATION DATE:

7/25/2025 6:01:22 PM

CASE:

2027 PM Build with
Commuter

ORGANIZATION:

Barton and Loguidice

UNITS:

English

ANALYSIS BY:

TCB

DEFAULT GROUND TYPE:

FieldGrass

PROJECT/CONTRACT

Amazon DAN8

ATMOSPHERICS:

68°F, 50%

Average pavement type shall be used unless a state

PAVEMENT TYPE(S) USED:

Average

highway agency substantiates the use of a different
type with approval FHWA.

Receiver				Modeled Traffic Noise Levels					
Name	No.	Nb. R.R.	Existing LAeq dBA						
				LAeq		Increase over Existing		Type of Impact	
				Calc.	Absolute Criterion	Calc.	Relative Criterion		
				dBA	dBA	dBA	dBA		
Receiver19	0	0	---	58.3	66.0	---	---	None	
Receiver20	0	0	---	61.9	66.0	---	---	None	
Receiver21	0	0	---	59.2	66.0	---	---	None	
Receiver25	0	0	---	60.6	66.0	---	---	None	
Receiver30	0	0	---	58.2	66.0	---	---	None	
Receiver37	0	0	---	58.6	66.0	---	---	None	
Receiver-7	0	0	---	66.1	0.0	---	---	Sound Level	

Appendix C

Truck Backup Alarm Sections

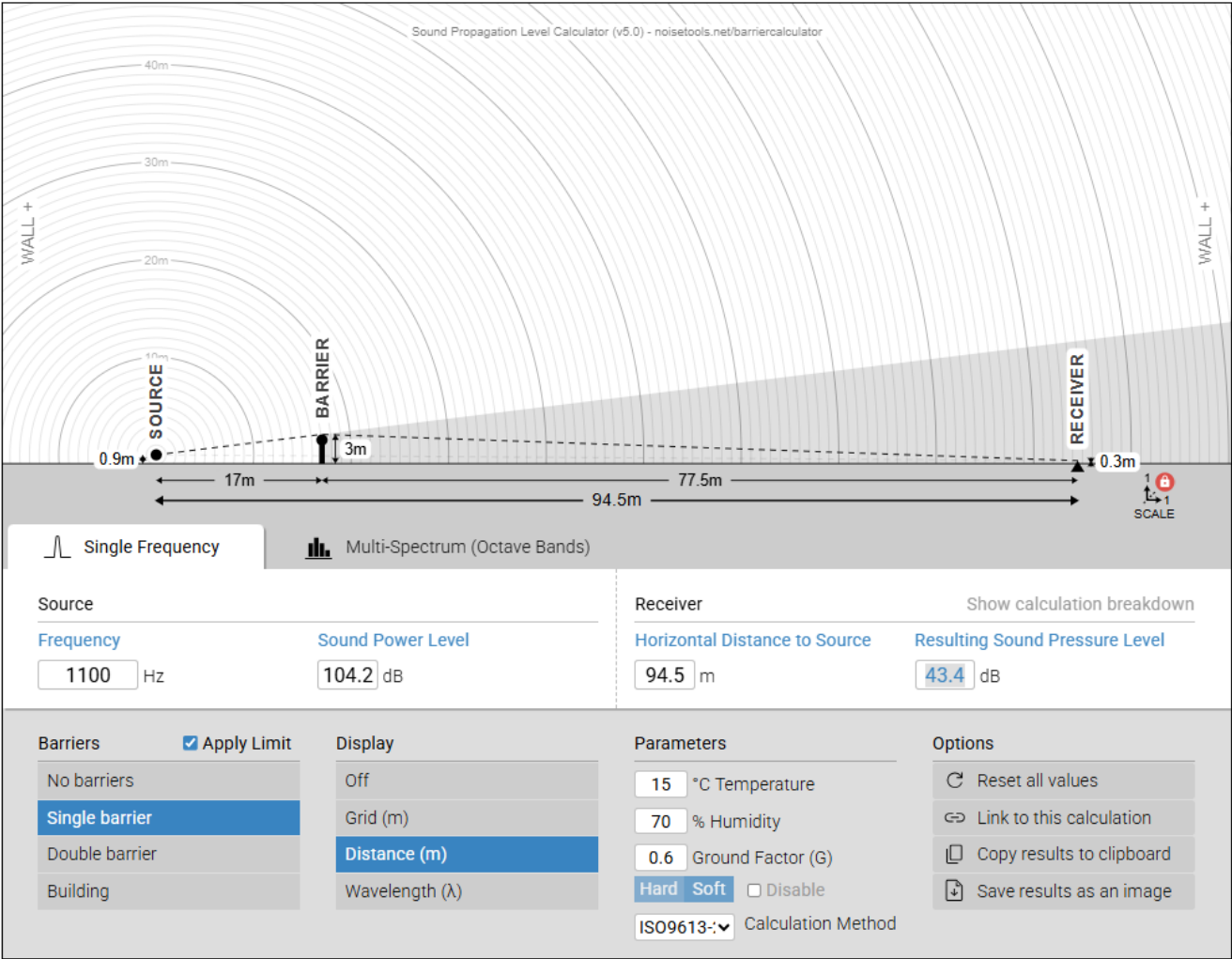
- Section A
- Section B
- Section C

The following Diagrams (A through C) represent the travel path of the sound emitted from the tractor trailer ruck backup alarms as shown by the black dotted line. The second story window of the home was used to represent an open window (elevation 637' or 0.3 m above the datum) with the assumption the room would be occupied.

The truck apron is proposed to be constructed at elevation 636' (Datum Elevation = 0.0 m for this calculation) with the backup alarm 3' (0.9m) above above the datum of 636'.

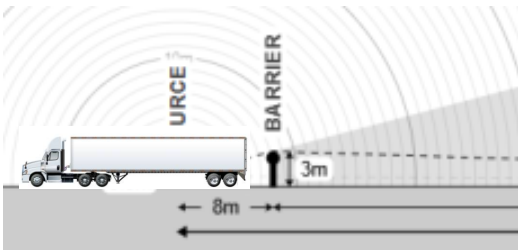
Sound Propagation Level Calculator

Interactive noise source and receiver diagram with barrier calculations (CNOSSOS-EU update)



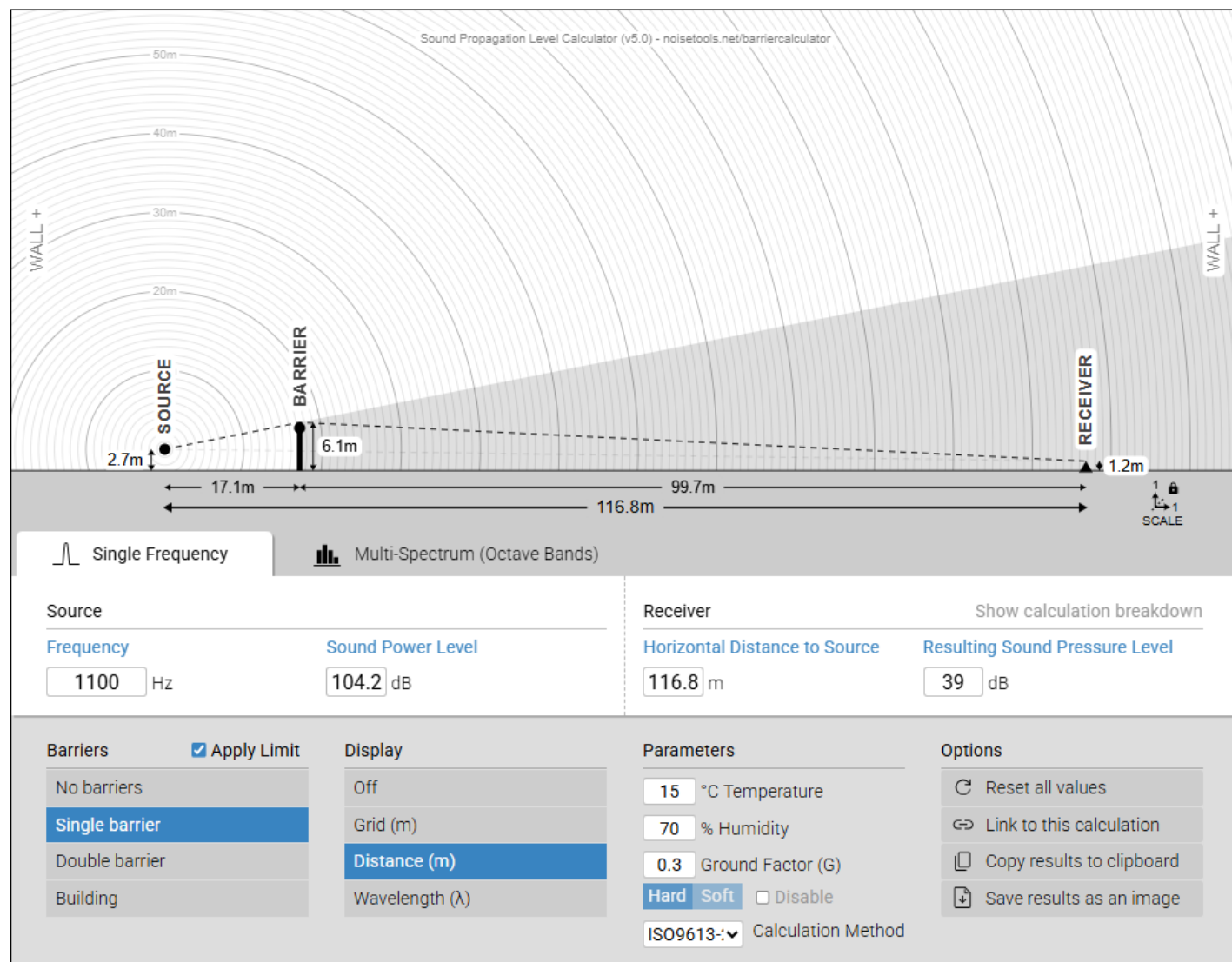
Backup Alarm Location A

- Datum = 636' Elevation
- Barrier 10' = 3.0 m
- Receptor Height = 637'
- Source (alarm) = 3' (0.9m) above truck parking area = 639'
- Ground Elevation of Receptor = 623'
- Window Height 14' above ground elevation = 637'
- Backup alarm distance to barrier - 17 m



Sound Propagation Level Calculator

Interactive noise source and receiver diagram with barrier calculations (CNOSSOS-EU update)



Backup Alarm Location B

Datum = 630' Elevation

Barrier 10' = 3.0m

Receptor Height = 634'

Source(alarm)= 3' above truck parking area of 636' = 639'

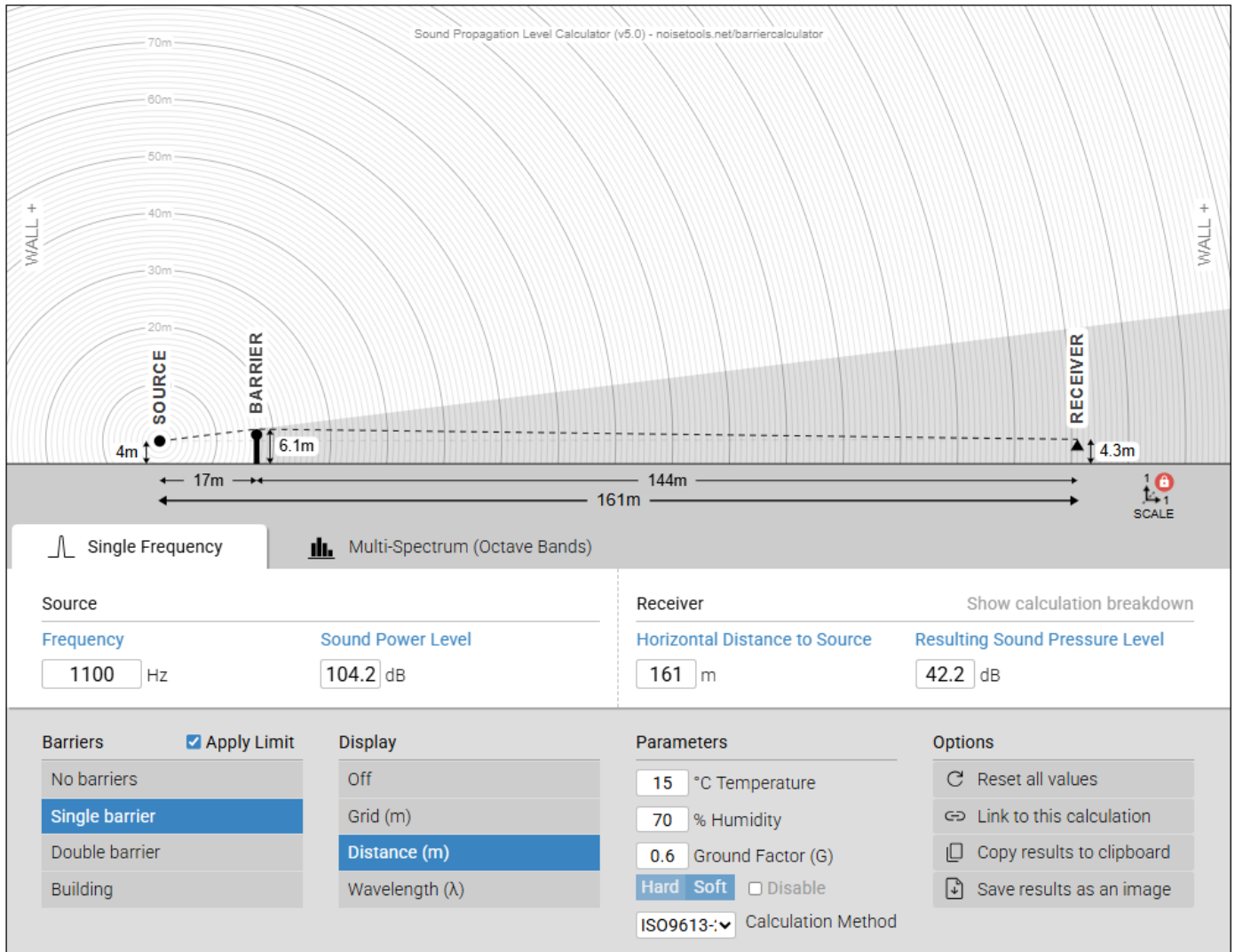
Ground Elevation of Receptor = 620'

Window Height 14' above ground elevation = 634'

Distance to Barrier - Backup Alarm 17.1m

Sound Propagation Level Calculator

Interactive noise source and receiver diagram with barrier calculations (CNOSSOS-EU update)



Backup Alarm Location C

Datum = 626' Elevation

Barrier 10' high - (20' (6.1m) above the datum of 626')

Receptor Height = 640' (4.3m above datum)

Source (alarm) = 3' (0.9m) above truck parking area = 639'

Ground Elevation of Receptor = 626'

Window Height 14' above ground elevation = 640'

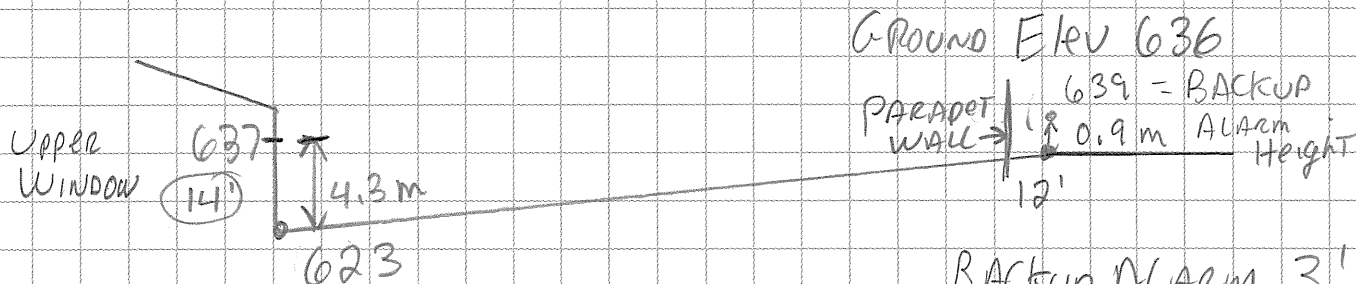
Distance to Barrier - Backup Alarm 17m

102.4 @ 1100 HZ SP

Elev 636 = 0m

310' = 94.5 m

12' = 3.66 m



Backup ALARM 3' ABOVE GROUND Elev = 639

12' = 3.66 m

4 @ Same Time = 47.2 8' WALL 41.2
 4 @ Same Time = 44.4 10' WALL 38.4

USE 10' PARAPET WALL

GROUND Elev = 636 = 0m

Backup ALARM = 639

BARRIER = 3.0 m High

Elev 0m = 636

Backup ALARM = 0.9 m

WALL = 3.0 m

Upper WINDOW = 1' ABOVE 636 OR 0.3 m

Ⓑ $380' = 116.8m$

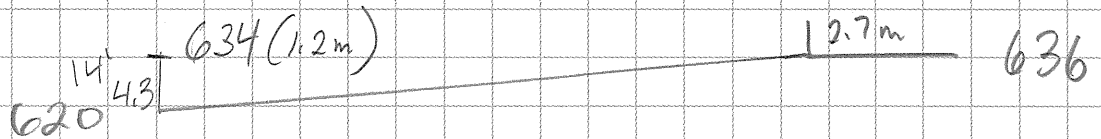
Elev @ B $620'$

Ground Elev @ BARRIER = 636

Backup Alarm Elev = 639

BARRIER = $3.0m$ ABOVE $636 = 650' = 20'$ ABOVE DATUM
 $(10')$ $= 6.1m$

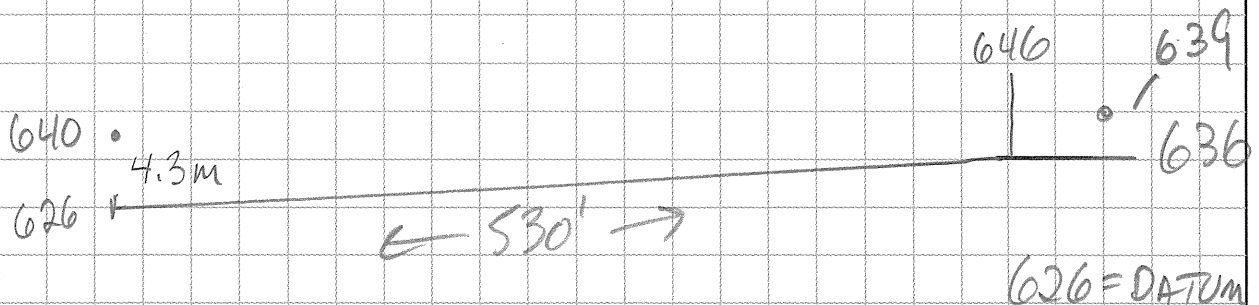
$630 = 0m$
 DATUM



$634 - 630 = 4' = 1.2m$ ABOVE 0

$639 - 630$
 $9' = 2.7m$

Ⓒ



BARRIER = $20'$ ABOVE
 DATUM = $6.1m$

$626 = DATUM$

$639 - 626$
 $13' = 3.96m$

Appendix D

HVAC Units

- Literature From Trane
- Sound Power from Literature to Sound Pressure Conversion
- Hand Backup Calculation

VOYAGER™ III ROOFTOP UNITS - TRANE · 275 300 350 400 500 600. WKD/WKH DKD/DKH 400 500 600....

Home / Documents / Voyager™ III Rooftop Units - Trane · 275 300 350 400 500 600. WKD/WKH DKD/DKH 400 500 600. 275-300 350 400 500 600. Standard . Controls



23

of 36



Table 6 - Overall Outdoor Sound Power Level (Env.)

		63 Hz	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	8000 Hz	
TKD/H - YKD/H	275	74.7 dBA	73.9 dBA	78.5 dBA	82.2 dBA	83.1 dBA	79.3 dBA	71.9 dBA	56.7 dBA	88 dBA
TKD/H - YKD/H	300	74.9 dBA	74.1 dBA	78.7 dBA	83.0 dBA	83.6 dBA	80.5 dBA	73.7 dBA	56.9 dBA	88 dBA
TKD/H - YKD/H	350	74.9 dBA	74.1 dBA	78.8 dBA	83.5 dBA	83.8 dBA	81.3 dBA	74.9 dBA	56.9 dBA	89 dBA
TKD/H - YKD/H	400	75.8 dBA	75.1 dBA	79.8 dBA	84.6 dBA	84.9 dBA	82.2 dBA	75.5 dBA	57.7 dBA	90 dBA
TKD/H - YKD/H	500	75.9 dBA	75.3 dBA	80.0 dBA	85.3 dBA	85.9 dBA	82.2 dBA	75.4 dBA	57.9 dBA	90 dBA
TKD/H - YKD/H	600	76.0 dBA	75.3 dBA	80.0 dBA	85.6 dBA	86.1 dBA	82.6 dBA	75.5 dBA	57.9 dBA	91 dBA
WKD/H - DKD/H	400	75.8 dBA	75.1 dBA	79.8 dBA	84.0 dBA	84.7 dBA	84.9 dBA	77.3 dBA	57.7 dBA	90 dBA
WKD/H - DKD/H	500	76.0 dBA	75.3 dBA	80.0 dBA	85.1 dBA	85.4 dBA	82.8 dBA	75.8 dBA	57.9 dBA	90 dBA
WKD/H - DKD/H	600	75.9 dBA	75.3 dBA	80.0 dBA	86.0 dBA	86.8 dBA	82.4 dBA	75.2 dBA	57.9 dBA	91 dBA

Table 7 - SUPPLY Indoor Sound Power level (In duct)

		63 Hz	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	8000 Hz	
TKD/H - YKD/H	275	56.5 dBA	63.9 dBA	67.9 dBA	78.6 dBA	71.9 dBA	70.1 dBA	65.9 dBA	59.8 dBA	80 dBA
TKD/H - YKD/H	300	57.0 dBA	64.4 dBA	68.4 dBA	79.1 dBA	72.4 dBA	70.6 dBA	66.4 dBA	60.3 dBA	81 dBA
TKD/H - YKD/H	350	58.0 dBA	65.4 dBA	69.4 dBA	80.1 dBA	73.4 dBA	71.6 dBA	67.4 dBA	61.3 dBA	82 dBA
TKD/H - YKD/H	400	58.9 dBA	68.3 dBA	72.4 dBA	82.1 dBA	75.4 dBA	73.6 dBA	67.4 dBA	60.2 dBA	84 dBA
TKD/H - YKD/H	500	58.5 dBA	68.9 dBA	72.9 dBA	81.6 dBA	75.9 dBA	74.1 dBA	69.9 dBA	62.8 dBA	84 dBA
TKD/H - YKD/H	600	58.1 dBA	69.5 dBA	73.4 dBA	81.1 dBA	76.4 dBA	74.6 dBA	72.4 dBA	65.4 dBA	84 dBA
WKD/H - DKD/H	400	58.9 dBA	68.3 dBA	72.4 dBA	82.1 dBA	75.4 dBA	73.6 dBA	67.4 dBA	60.2 dBA	84 dBA
WKD/H - DKD/H	500	58.5 dBA	68.9 dBA	72.9 dBA	81.6 dBA	75.9 dBA	74.1 dBA	69.9 dBA	62.8 dBA	84 dBA

Sound Propagation Level Calculator

Interactive noise source-to-receiver diagram with barrier calculations

Sound Propagation Level Calculator (Version 3.6) - MAS Environmental Ltd 2021 - www.masenv.co.uk

WALL +

WALL +

0.9m

15.2m

1.5m

RECEIVER

SCALE

Single Frequency

Multi Spectrum

Source

63	125	250	500	1k	2k	4k	8k	Hz
76	75.3	80	85.6	86.1	82.6	75.5	57.9	dB

Total Sound Power Level 90.7 dB

Receiver

63	125	250	500	1k	2k	4k	8k	Hz
44.4	43.7	48.3	53.9	54.4	50.8	43.5	25.1	dB

Resulting Sound Pressure Level 58.9 dB

☐ A-Weighted

Barriers

- No barriers
- Single barrier
- Double barrier
- Building

Display

- Off
- Grid (m)
- Distance (m)
- Wavelength (λ)

Environmental Parameters

20 °C Temperature

70 % Humidity

0 Ground Factor (G)

Hard Soft Original IS v

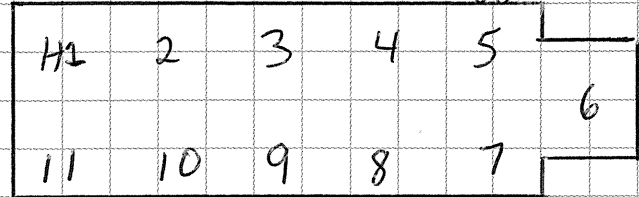
Options

- Reset all values
- Link to this calculation
- Copy results to clipboard
- Save results as an image

R7 = Closest Receptor

HVAC

PROPOSED WAREHOUSE



		DISTANCE TO R7	dB	
H 1	613	38.0		
2	625	37.9		
3	677	37.2		
4	772	36.0		48.3 COMBINED @ R7
5	878	34.9		
6	926	34.5		
7	776	36.0	-3	33.0
8	657	37.4	-3	34.4
9	540	39.1	-3	36.1
10	475	40.3	-3	37.3
11	456	40.6	-3	37.6
		48.3		46.8

TYPICAL HVAC UNIT 50 TON UNITS TRANE 600
 USING SPECIFICATIONS OF 90.7 dBA SOUND POWER
 EQUATES TO 58.9 dBA @ 50'

* USE 2 TONS OF AC REQUIRED PER 1000 SF

Appendix E

Field Measurement Data Sheets

- Field Measurement Data Sheets
- Summary Sheets from Sound Meter

Field Measurement DATA

M1	11/15/22	7:24 AM - 7:58 AM	W = 0-1 mph T = 20°F H = 68%
	11/15/22	10:13 AM - 11:16 AM	W = 0-1 mph T = 32°F H = 46%
	11/15/22	4:03 PM - 4:33 PM	W = 0-2 mph T = 36°F H = 39%
	11/23/22	11:10 PM - 11:45 PM	W = 0 mph T = 28°F H = 79%
M2	11/15/22	8:10 AM - 8:33 AM	W = 0-1 mph T = 26°F H = 58%
	11/15/22	11:20 AM - 11:51 AM	W = 0-1 mph T = 33°F H = 36%
	11/15/22	4:36 PM - 5:12 PM	W = 0-1 mph T = 36°F H = 56%
	11/23/22	9:40 PM - 10:16 PM	W = 0 mph T = 33°F H = 65%

Note: DATA FILES FROM SOUND METER
 ARE 1 HOUR LATER THAN ACTUAL
 TIME DUE TO DAYLIGHT SAVINGS TIME
 SETTING ON METER

Field Measurement DATA

Location	Date	Time	W	T	H
M3	11/15/22	8:38 AM - 9:06 AM	W = 0-1 mph	T = 27°F	H = 56%
	11/15/22	5:16 pm - 5:46 pm	W = 0 mph	T = 36°F	H = 58%
	11/23/22	10:28 pm - 11:00 pm	W = 0 mph	T = 31°F	H = 74%
M4	11/15/22	9:22 AM - 9:58 AM	W = 0-2 mph	T = 28°F	H = 46%
	11/23/22	9:03 pm - 9:35 pm	W = 0	T = 34°F	H = 64%

NOTE: DATA FILES FROM SOUND METER
SHOW 1 HOUR LATER THAN ACTUAL
TIME PERIOD MEASURED DUE TO
DAY LIGHT SAVINGS TIME SETTING ON METER

EXAMPLE: M4 DATA FILE FOR 9:22 AM WAS LOGGED
AS 10:22 AM

Session Report

3/29/2023

General Information

Name S008_BIJ090026_28112022_104411

Comments

Start Time 11/15/2022 5:36:16 PM

Stop Time 11/15/2022 6:12:21 PM

Run Time 00:36:05

Model Type SoundPro DL

Serial Number BIJ090026

Device Firmware Rev R.13B

Company Name

Description

Location

User Name

Summary Data

<u>Description</u>	<u>Meter</u>	<u>Value</u>	<u>Description</u>	<u>Meter</u>	<u>Value</u>
Dose	1	9414.2 %	Pdose (1:00)	1	9999.9 %
Lavg	1	--	Lpk	1	98.1 dB
Leq	1	70.9 dB	TWA	1	59.7 dB
UL Time	1	00:00:00	SEL	1	104.3 dB
ProjectedTWA (1:00)	1	61.9 dB	Mntime	1	11/15/2022 5:50:21 PM
Mxtime	1	11/15/2022 5:44:56 PM	PKtime	1	11/15/2022 5:52:14 PM
Weighting	1	--	Range Ceiling	1	--
Criterion Level	1	--	ULL	1	--
Dynamic Range	1	--	Exchange Rate	1	--
Response	1	--	Int Threshold	1	--
Alarm Level 1	1	--	AlarmLevel2	1	--
Dosimeter Name	1	--			
Dose	2	0.3 %	Pdose (1:00)	2	3.9 %
Lavg	2	--	Lpk	2	98.1 dB
Leq	2	70.9 dB	TWA	2	59.7 dB
UL Time	2	00:00:00	SEL	2	104.3 dB

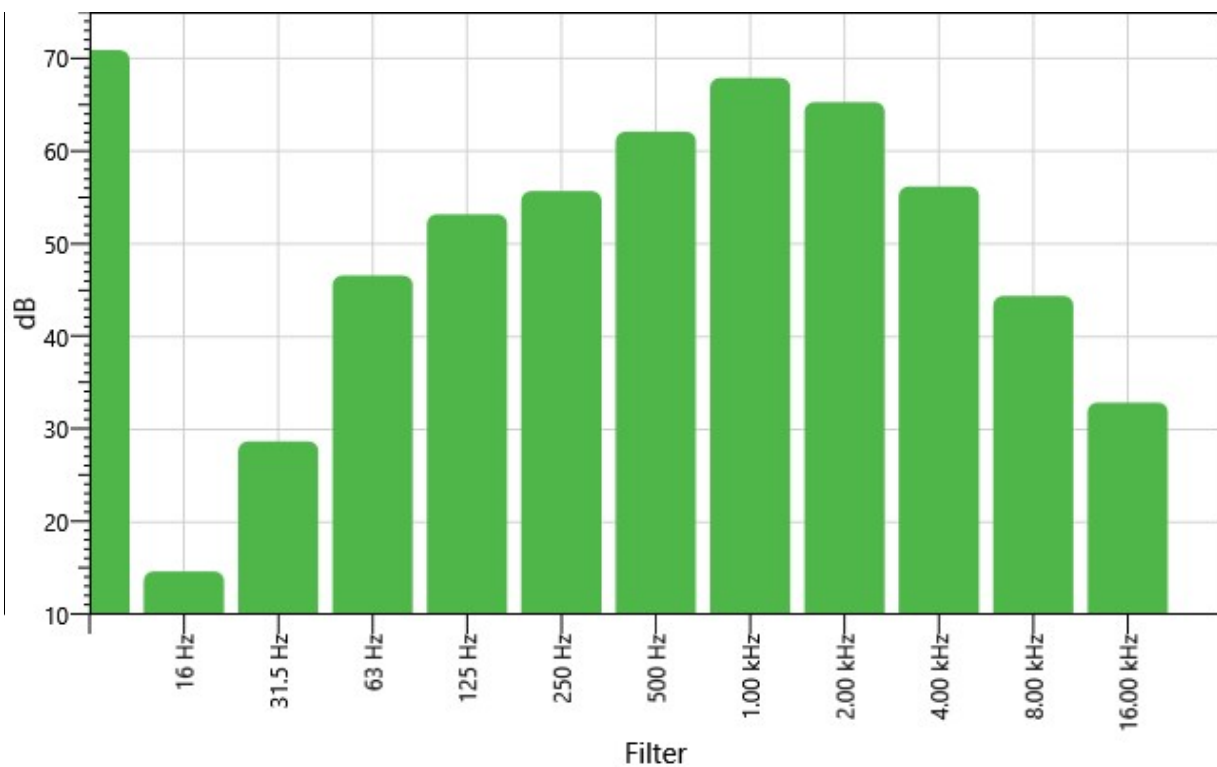
ProjectedTWA (1:00)	2	70.9 dB	Mntime	2	11/15/2022 5:50:21 PM
Mxtime	2	11/15/2022 5:44:56 PM	PKtime	2	11/15/2022 5:52:14 PM
Weighting	2	A	Range Ceiling	2	--
Criterion Level	2	85 dB	ULL	2	115 dB
Dynamic Range	2	--	Exchange Rate	2	3 dB
Response	2	FAST	Integrating Threshold	2	80 dB
Alarm Level 1	2	--	AlarmLevel2	2	--
Dosimeter Name	2	--			

Calibration History

Date	Calibration Action	Level	Cal. Model Type	Serial Number	Cert. Due Date
11/15/2022 8:21:35 AM	Calibration	114.0			

Filter Summary Chart

S008_BIJ090026_28112022_104411: Filter Summary Chart - Leq



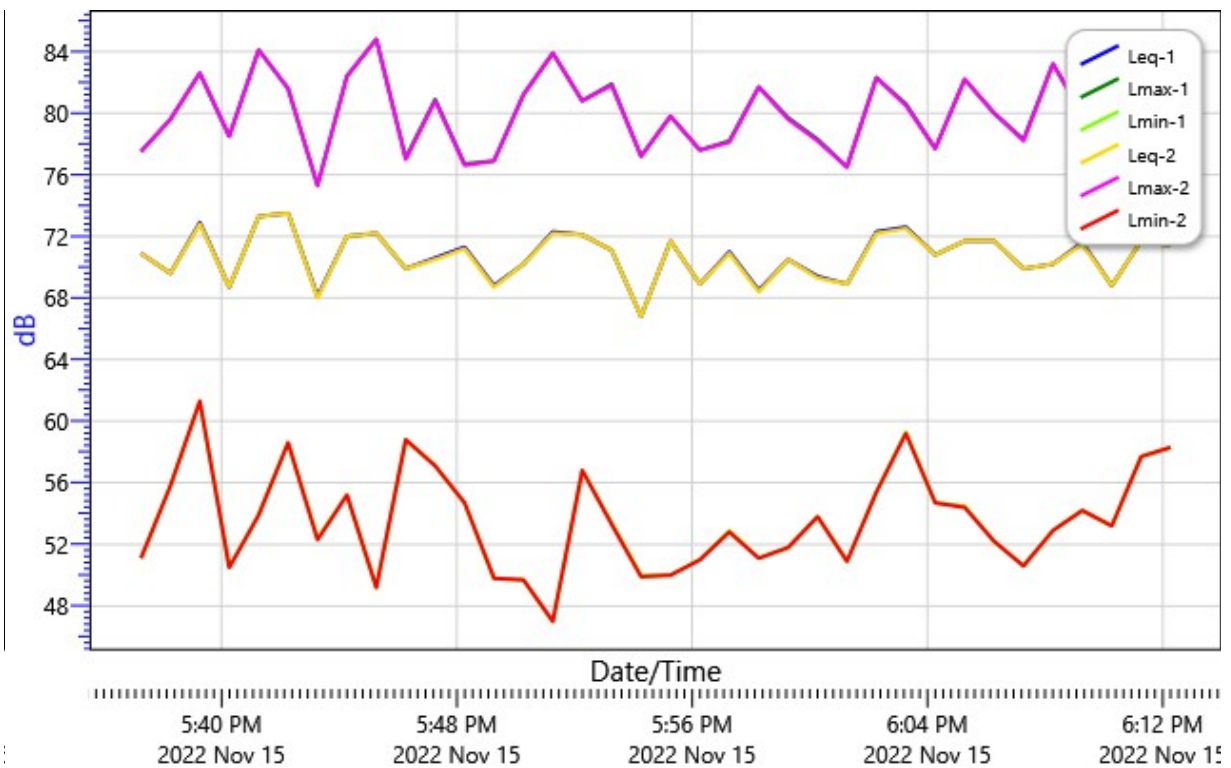
Filter Summary - Dose

Filter	Dose
	9414.2 %

16 Hz	0 %
31.5 Hz	0.6 %
63 Hz	35 %
125 Hz	157.3 %
250 Hz	281.8 %
500 Hz	1232.2 %
1.00 kHz	4719.6 %
2.00 kHz	2571.1 %
4.00 kHz	319.9 %
8.00 kHz	20.9 %
16.00 kHz	1.5 %

Logged Data Chart

S008_BIU090026_28112022_104411: Logged Data Chart - Read Only



Session Report

3/29/2023

General Information

Name S002_BIJ090026_16112022_104812

Comments

Start Time 11/15/2022 9:10:52 AM

Stop Time 11/15/2022 9:33:12 AM

Run Time 00:22:20

Model Type SoundPro DL

Serial Number BIJ090026

Device Firmware Rev R.13B

Company Name

Description

Location

User Name

Summary Data

Description	Meter	Value	Description	Meter	Value
Dose	1	5440 %	Pdose (1:00)	1	9999.9 %
Lavg	1	--	Lpk	1	98 dB
Leq	1	70.6 dB	TWA	1	57.3 dB
UL Time	1	00:00:00	SEL	1	101.9 dB
ProjectedTWA (1:00)	1	61.6 dB	Mntime	1	11/15/2022 9:27:38 AM
Mxtime	1	11/15/2022 9:13:53 AM	PKtime	1	11/15/2022 9:13:53 AM
Weighting	1	--	Range Ceiling	1	--
Criterion Level	1	--	ULL	1	--
Dynamic Range	1	--	Exchange Rate	1	--
Response	1	--	Int Threshold	1	--
Alarm Level 1	1	--	AlarmLevel2	1	--
Dosimeter Name	1	--			
Dose	2	0.2 %	Pdose (1:00)	2	3.7 %
Lavg	2	--	Lpk	2	98 dB
Leq	2	70.6 dB	TWA	2	57.3 dB
UL Time	2	00:00:00	SEL	2	101.9 dB

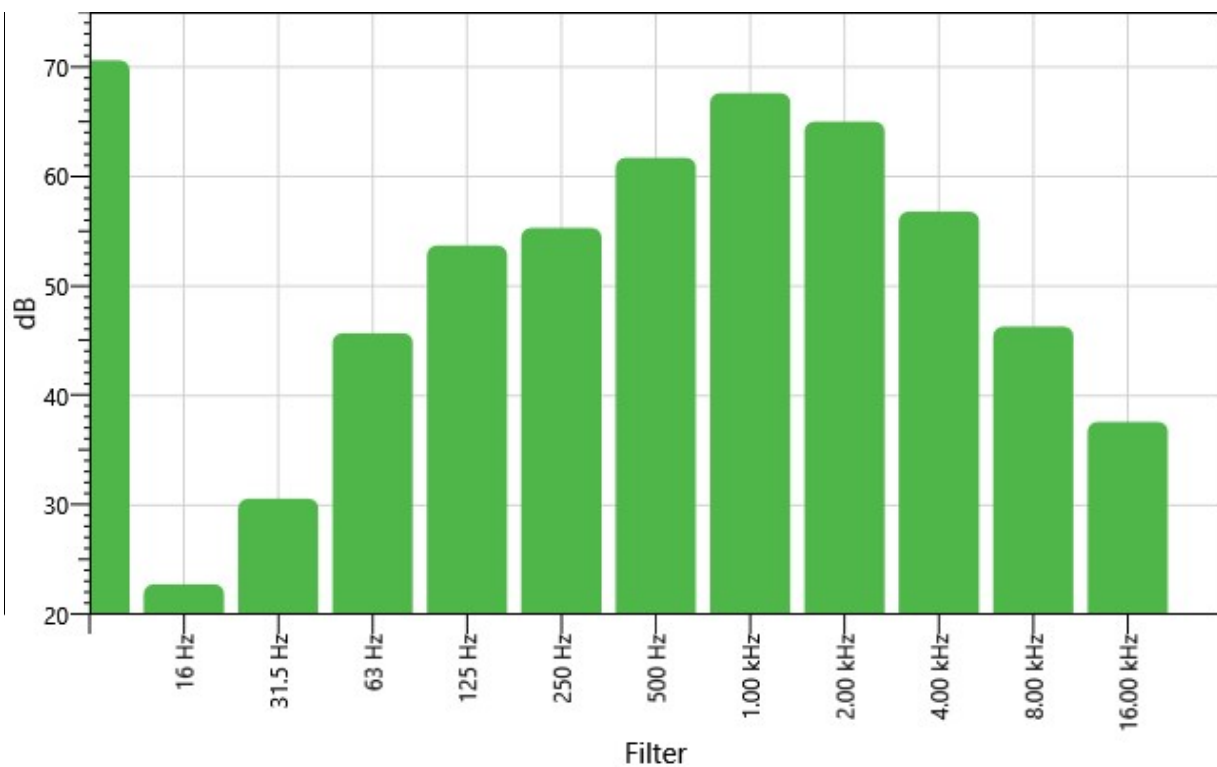
ProjectedTWA (1:00)	2	70.6 dB	Mntime	2	11/15/2022 9:27:40 AM
Mxtime	2	11/15/2022 9:13:53 AM	PKtime	2	11/15/2022 9:13:53 AM
Weighting	2	A	Range Ceiling	2	--
Criterion Level	2	85 dB	ULL	2	115 dB
Dynamic Range	2	--	Exchange Rate	2	3 dB
Response	2	FAST	Integrating Threshold	2	80 dB
Alarm Level 1	2	--	AlarmLevel2	2	--
Dosimeter Name	2	--			

Calibration History

Date	Calibration Action	Level	Cal. Model Type	Serial Number	Cert. Due Date
11/15/2022 8:21:35 AM	Calibration	114.0			

Filter Summary Chart

S002_BIJ090026_16112022_104812: Filter Summary Chart - Leq



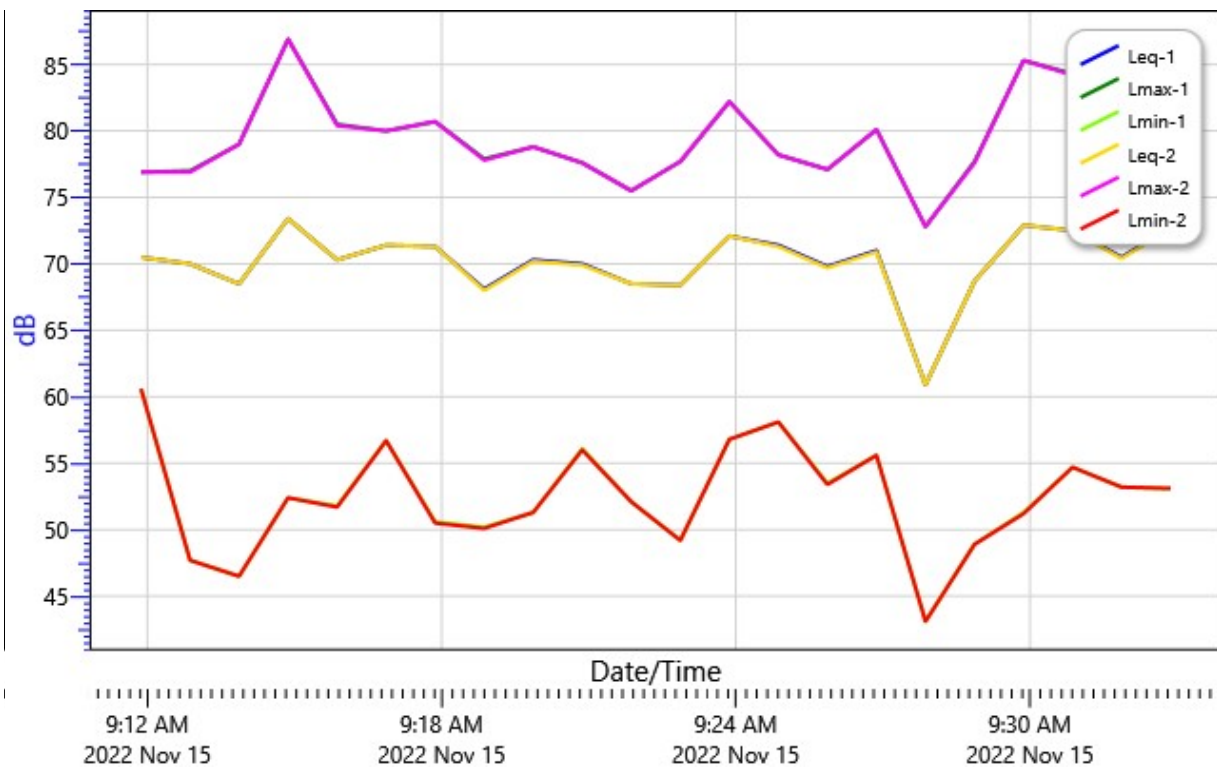
Filter Summary - Dose

Filter	Dose
	5440 %

16 Hz	0.1 %
31.5 Hz	0.5 %
63 Hz	17.4 %
125 Hz	110.9 %
250 Hz	159.9 %
500 Hz	692.2 %
1.00 kHz	2687.9 %
2.00 kHz	1479.2 %
4.00 kHz	223.8 %
8.00 kHz	20.2 %
16.00 kHz	2.7 %

Logged Data Chart

S002_BIU090026_16112022_104812: Logged Data Chart - Read Only



Session Report

3/29/2023

General Information

Name S006_BIJ090026_28112022_104357

Comments

Start Time 11/15/2022 12:20:16 PM

Stop Time 11/15/2022 12:51:32 PM

Run Time 00:31:16

Model Type SoundPro DL

Serial Number BIJ090026

Device Firmware Rev R.13B

Company Name

Description

Location

User Name

Summary Data

<u>Description</u>	<u>Meter</u>	<u>Value</u>	<u>Description</u>	<u>Meter</u>	<u>Value</u>
Dose	1	6109.1 %	Pdose (1:00)	1	9999.9 %
Lavg	1	--	Lpk	1	98.2 dB
Leq	1	69.7 dB	TWA	1	57.8 dB
UL Time	1	00:00:00	SEL	1	102.4 dB
ProjectedTWA (1:00)	1	60.6 dB	Mntime	1	11/15/2022 12:23:53 PM
Mxtime	1	11/15/2022 12:29:03 PM	PKtime	1	11/15/2022 12:37:35 PM
Weighting	1	--	Range Ceiling	1	--
Criterion Level	1	--	ULL	1	--
Dynamic Range	1	--	Exchange Rate	1	--
Response	1	--	Int Threshold	1	--
Alarm Level 1	1	--	AlarmLevel2	1	--
Dosimeter Name	1	--			
Dose	2	0.2 %	Pdose (1:00)	2	2.9 %
Lavg	2	--	Lpk	2	98.1 dB
Leq	2	69.6 dB	TWA	2	57.8 dB
UL Time	2	00:00:00	SEL	2	102.4 dB

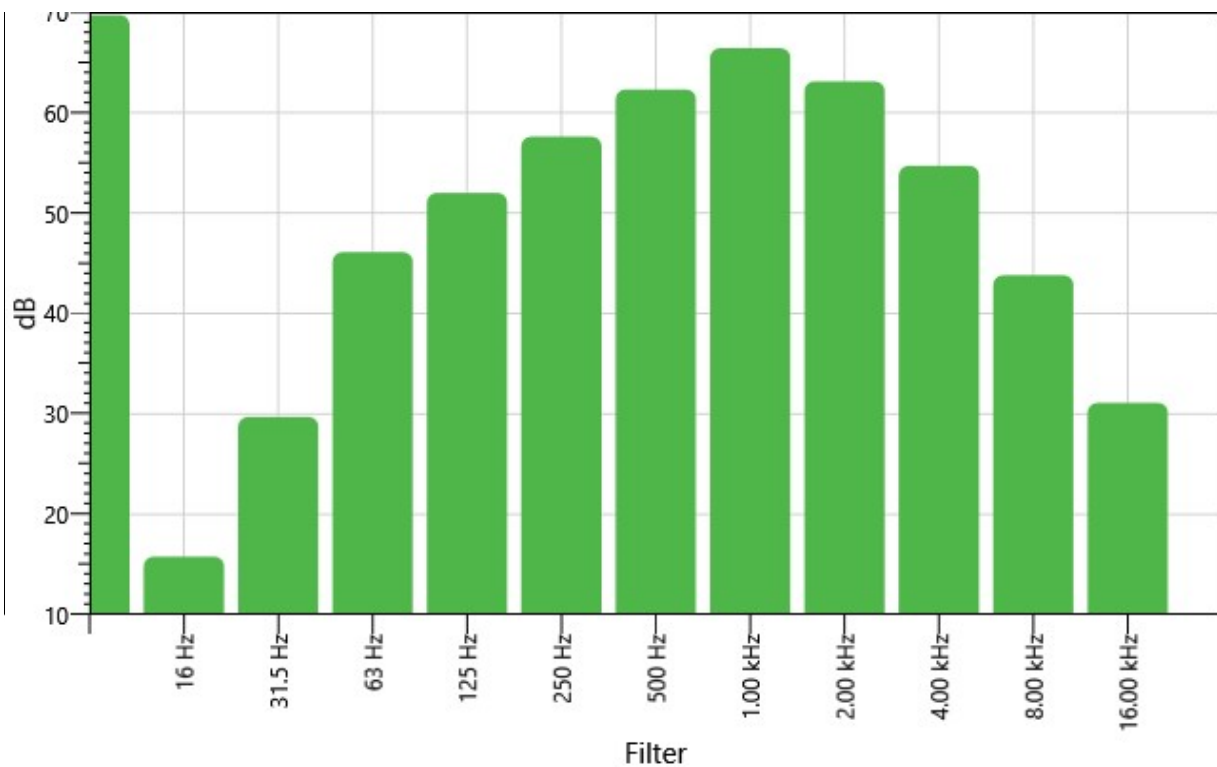
ProjectedTWA (1:00)	2	69.6 dB	Mntime	2	11/15/2022 12:23:53 PM
Mxtime	2	11/15/2022 12:29:03 PM	PKtime	2	11/15/2022 12:37:35 PM
Weighting	2	A	Range Ceiling	2	--
Criterion Level	2	85 dB	ULL	2	115 dB
Dynamic Range	2	--	Exchange Rate	2	3 dB
Response	2	FAST	Integrating Threshold	2	80 dB
Alarm Level 1	2	--	AlarmLevel2	2	--
Dosimeter Name	2	--			

Calibration History

Date	Calibration Action	Level	Cal. Model Type	Serial Number	Cert. Due Date
11/15/2022 8:21:35 AM	Calibration	114.0			

Filter Summary Chart

S006_BIJ090026_28112022_104357: Filter Summary Chart - Leq



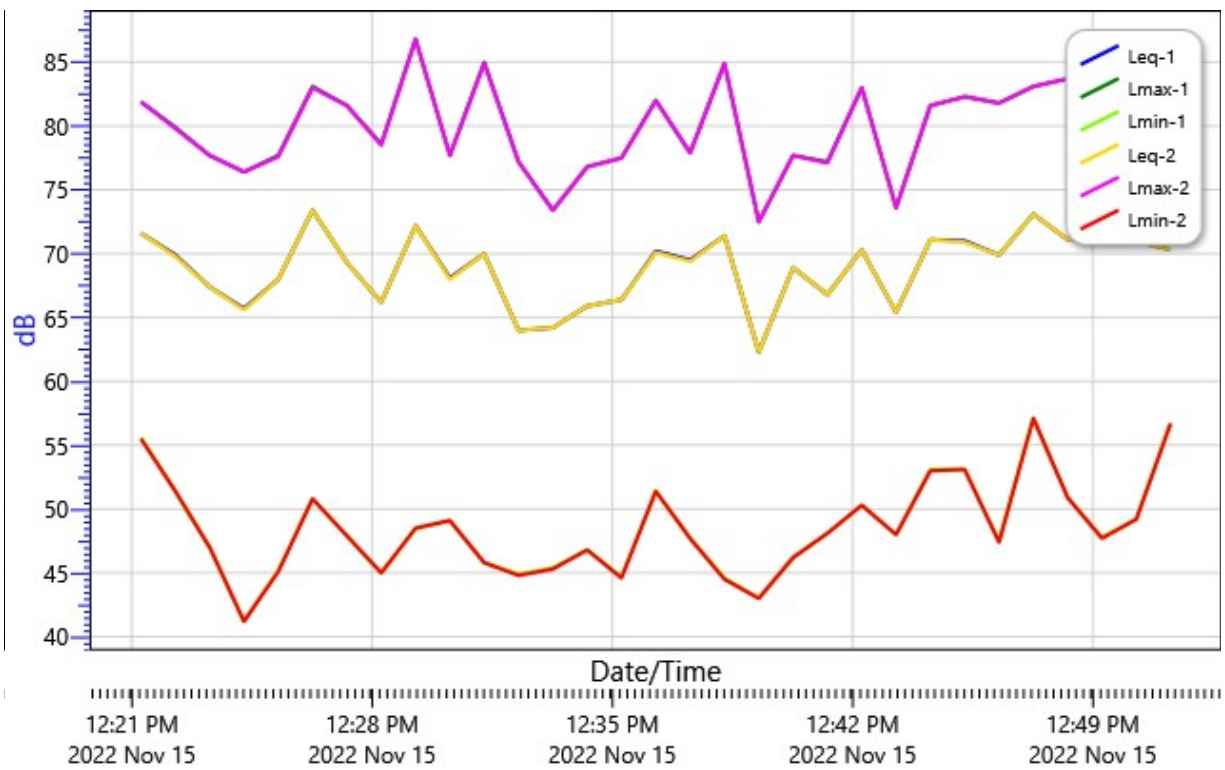
Filter Summary - Dose

Filter	Dose
	6109.1 %

16 Hz	0 %
31.5 Hz	0.6 %
63 Hz	26.6 %
125 Hz	103.6 %
250 Hz	380.5 %
500 Hz	1124.3 %
1.00 kHz	2850.9 %
2.00 kHz	1344.5 %
4.00 kHz	196.6 %
8.00 kHz	15.6 %
16.00 kHz	0.9 %

Logged Data Chart

S006_BIU090026_28112022_104357: Logged Data Chart - Read Only



Session Report

3/29/2023

General Information

Name S011_BIJ090026_28112022_104431

Comments

Start Time 11/23/2022 10:40:26 PM

Stop Time 11/23/2022 11:16:03 PM

Run Time 00:35:37

Model Type SoundPro DL

Serial Number BIJ090026

Device Firmware Rev R.13B

Company Name

Description

Location

User Name

Summary Data

<u>Description</u>	<u>Meter</u>	<u>Value</u>	<u>Description</u>	<u>Meter</u>	<u>Value</u>
Dose	1	1497.4 %	Pdose (1:00)	1	2522.5 %
Lavg	1	--	Lpk	1	94.8 dB
Leq	1	63 dB	TWA	1	51.7 dB
UL Time	1	00:00:00	SEL	1	96.3 dB
ProjectedTWA (1:00)	1	54 dB	Mntime	1	11/23/2022 10:50:27 PM
Mxtime	1	11/23/2022 10:54:35 PM	PKtime	1	11/23/2022 10:59:04 PM
Weighting	1	--	Range Ceiling	1	--
Criterion Level	1	--	ULL	1	--
Dynamic Range	1	--	Exchange Rate	1	--
Response	1	--	Int Threshold	1	--
Alarm Level 1	1	--	AlarmLevel2	1	--
Dosimeter Name	1	--			
Dose	2	0 %	Pdose (1:00)	2	0.6 %
Lavg	2	--	Lpk	2	94.8 dB
Leq	2	63 dB	TWA	2	51.7 dB
UL Time	2	00:00:00	SEL	2	96.3 dB

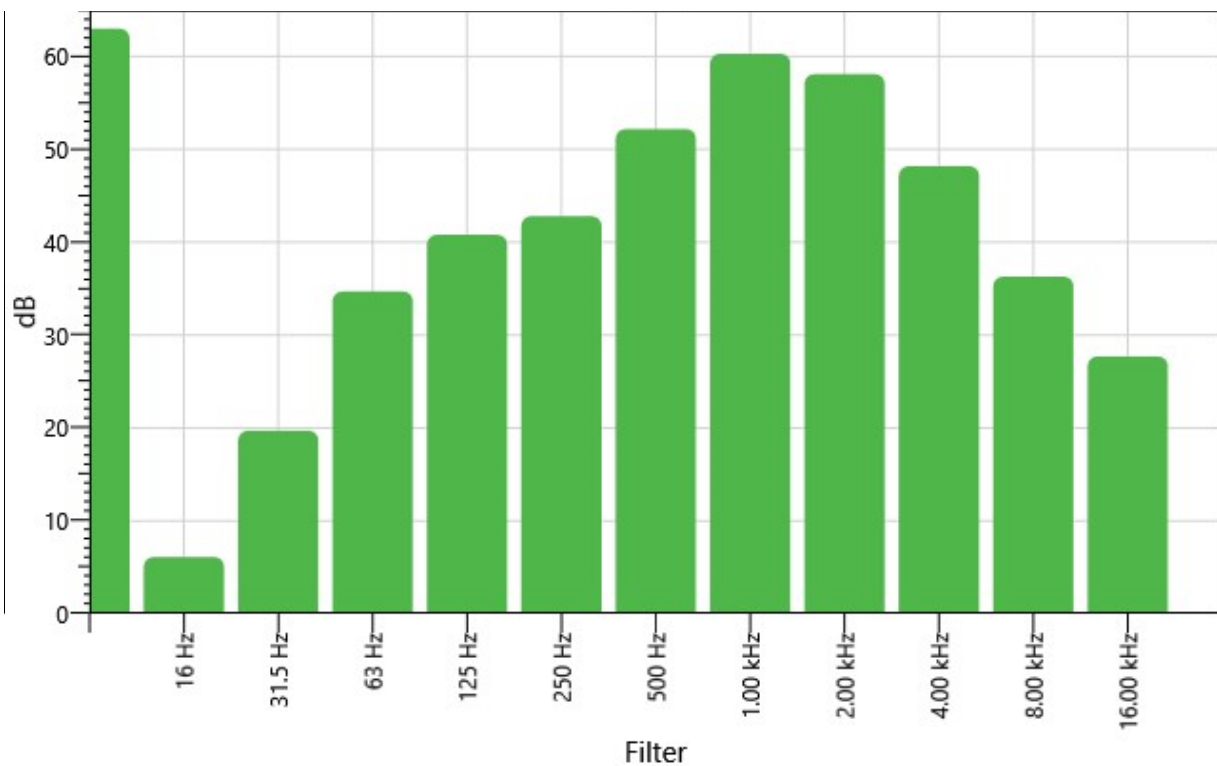
ProjectedTWA (1:00)	2	63 dB	Mntime	2	11/23/2022 10:50:27 PM
Mxtime	2	11/23/2022 10:54:35 PM	PKtime	2	11/23/2022 10:59:04 PM
Weighting	2	A	Range Ceiling	2	--
Criterion Level	2	85 dB	ULL	2	115 dB
Dynamic Range	2	--	Exchange Rate	2	3 dB
Response	2	FAST	Integrating Threshold	2	80 dB
Alarm Level 1	2	--	AlarmLevel2	2	--
Dosimeter Name	2	--			

Calibration History

Date	Calibration Action	Level	Cal. Model Type	Serial Number	Cert. Due Date
11/23/2022 PM	10:01:34 Calibration	114.0			

Filter Summary Chart

S011_BIU090026_28112022_104431: Filter Summary Chart - Leq



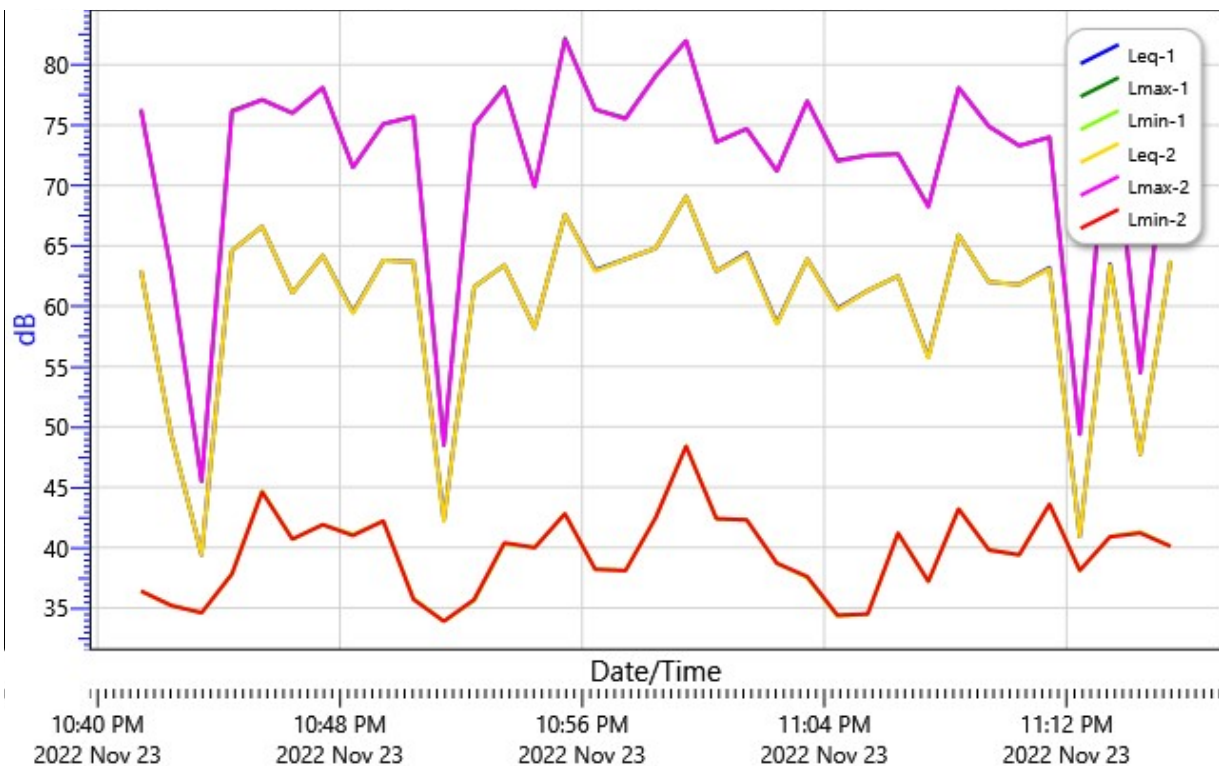
Filter Summary - Dose

Filter	Dose
--------	------

	1497.4 %
16 Hz	0 %
31.5 Hz	0.1 %
63 Hz	2.2 %
125 Hz	9 %
250 Hz	14.4 %
500 Hz	124.9 %
1.00 kHz	797.3 %
2.00 kHz	485.9 %
4.00 kHz	49.1 %
8.00 kHz	3.2 %
16.00 kHz	0.4 %

Logged Data Chart

S011_BIU090026_28112022_104431: Logged Data Chart - Read Only



Session Report

3/29/2023

General Information

Name S009_BIJ090026_28112022_104417

Comments

Start Time 11/15/2022 6:16:33 PM

Stop Time 11/15/2022 6:46:36 PM

Run Time 00:30:03

Model Type SoundPro DL

Serial Number BIJ090026

Device Firmware Rev R.13B

Company Name

Description

Location

User Name

Summary Data

Description	Meter	Value	Description	Meter	Value
Dose	1	5669.7 %	Pdose (1:00)	1	9999.9 %
Lavg	1	--	Lpk	1	107.7 dB
Leq	1	69.5 dB	TWA	1	57.5 dB
UL Time	1	00:00:00	SEL	1	102.1 dB
ProjectedTWA (1:00)	1	60.5 dB	Mntime	1	11/15/2022 6:17:57 PM
Mxtime	1	11/15/2022 6:32:30 PM	PKtime	1	11/15/2022 6:32:30 PM
Weighting	1	--	Range Ceiling	1	--
Criterion Level	1	--	ULL	1	--
Dynamic Range	1	--	Exchange Rate	1	--
Response	1	--	Int Threshold	1	--
Alarm Level 1	1	--	AlarmLevel2	1	--
Dosimeter Name	1	--			
Dose	2	0.2 %	Pdose (1:00)	2	2.8 %
Lavg	2	--	Lpk	2	107.7 dB
Leq	2	69.5 dB	TWA	2	57.5 dB
UL Time	2	00:00:00	SEL	2	102 dB

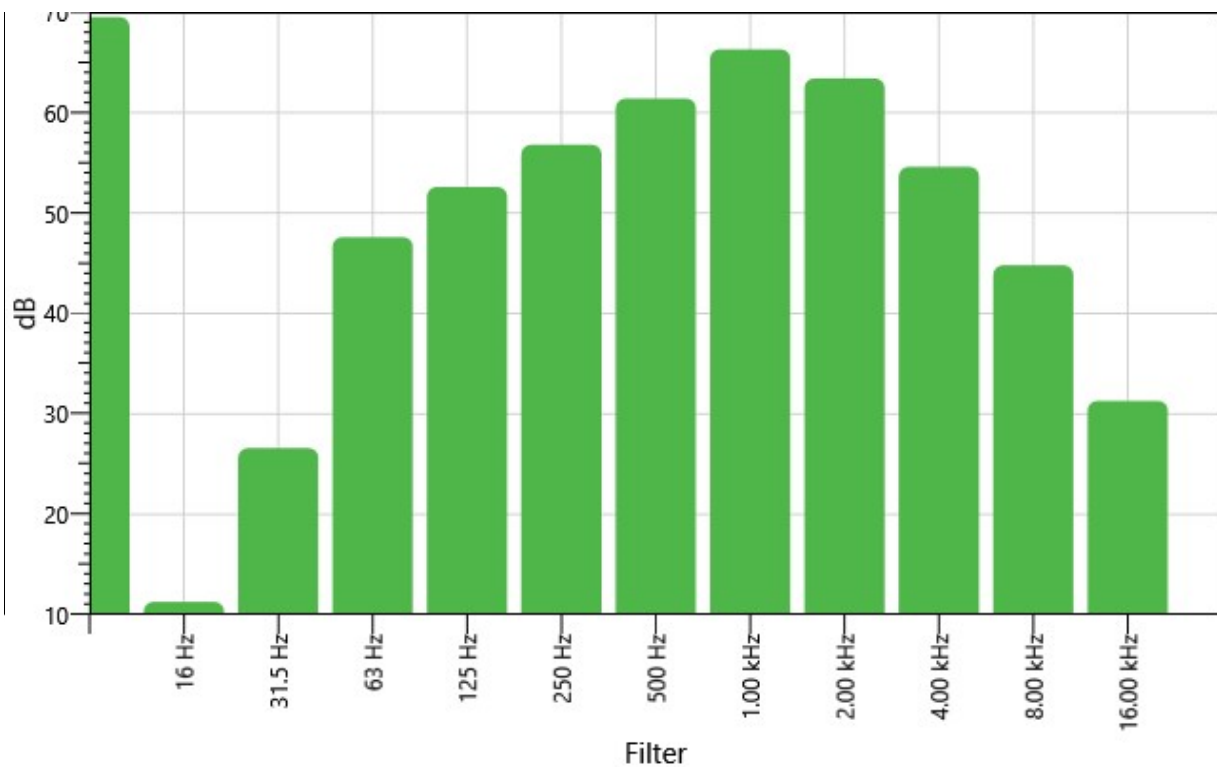
ProjectedTWA (1:00)	2	69.5 dB	Mntime	2	11/15/2022 6:17:57 PM
Mxtime	2	11/15/2022 6:32:30 PM	PKtime	2	11/15/2022 6:32:30 PM
Weighting	2	A	Range Ceiling	2	--
Criterion Level	2	85 dB	ULL	2	115 dB
Dynamic Range	2	--	Exchange Rate	2	3 dB
Response	2	FAST	Integrating Threshold	2	80 dB
Alarm Level 1	2	--	AlarmLevel2	2	--
Dosimeter Name	2	--			

Calibration History

Date	Calibration Action	Level	Cal. Model Type	Serial Number	Cert. Due Date
11/15/2022 8:21:35 AM	Calibration	114.0			

Filter Summary Chart

S009_BIJ090026_28112022_104417: Filter Summary Chart - Leq



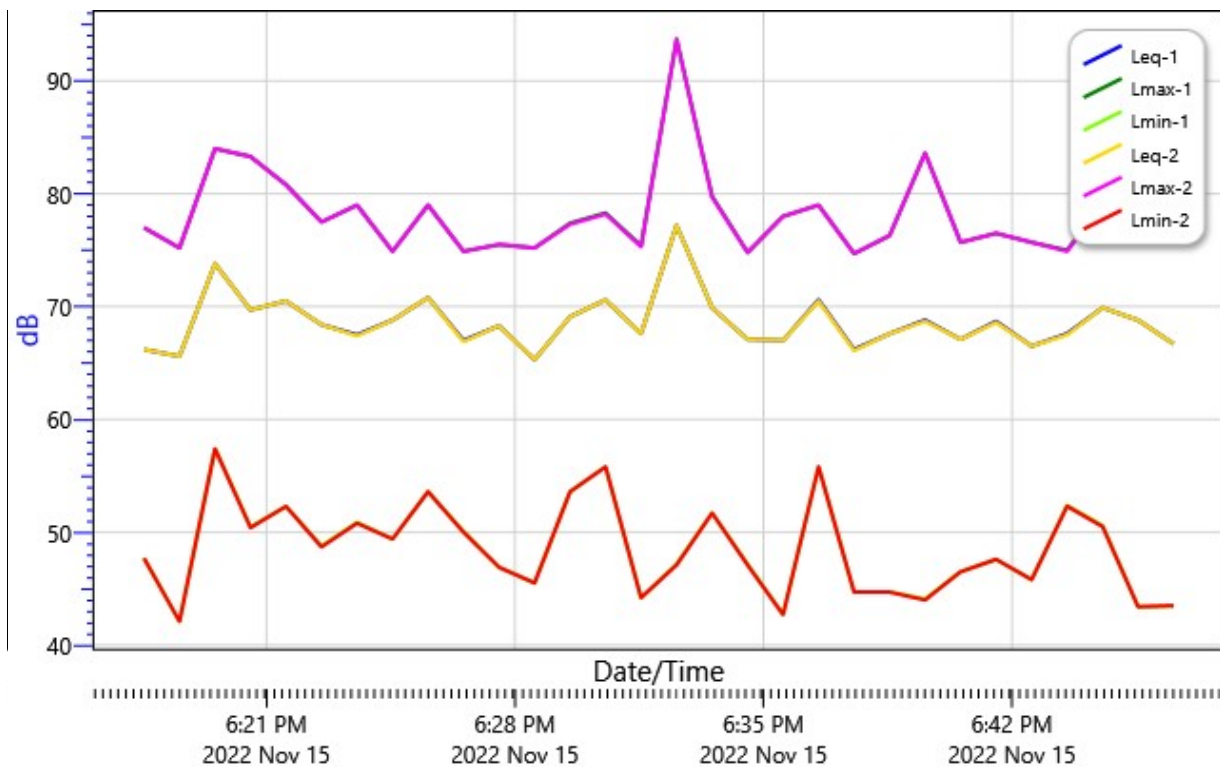
Filter Summary - Dose

Filter	Dose
	5669.7 %

16 Hz	0 %
31.5 Hz	0.3 %
63 Hz	36.5 %
125 Hz	115.6 %
250 Hz	305.5 %
500 Hz	867.5 %
1.00 kHz	2717.8 %
2.00 kHz	1371.5 %
4.00 kHz	183.7 %
8.00 kHz	19.1 %
16.00 kHz	0.8 %

Logged Data Chart

S009_BIU090026_28112022_104417: Logged Data Chart - Read Only



Session Report

3/29/2023

General Information

Name S003_BIJ090026_15112022_133133

Comments

Start Time 11/15/2022 9:38:30 AM

Stop Time 11/15/2022 10:06:46 AM

Run Time 00:27:34

Model Type SoundPro DL

Serial Number BIJ090026

Device Firmware Rev R.13B

Company Name

Description

Location

User Name

Summary Data

Description	Meter	Value	Description	Meter	Value
Dose	1	3228 %	Pdose (1:00)	1	7025.8 %
Lavg	1	--	Lpk	1	94 dB
Leq	1	67.4 dB	TWA	1	55 dB
UL Time	1	00:00:00	SEL	1	99.6 dB
ProjectedTWA (1:00)	1	58.4 dB	Mntime	1	11/15/2022 9:54:36 AM
Mxtime	1	11/15/2022 9:44:12 AM	PKtime	1	11/15/2022 9:49:54 AM
Weighting	1	--	Range Ceiling	1	--
Criterion Level	1	--	ULL	1	--
Dynamic Range	1	--	Exchange Rate	1	--
Response	1	--	Int Threshold	1	--
Alarm Level 1	1	--	AlarmLevel2	1	--
Dosimeter Name	1	--			
Dose	2	0.1 %	Pdose (1:00)	2	1.8 %
Lavg	2	--	Lpk	2	94 dB
Leq	2	67.4 dB	TWA	2	55 dB
UL Time	2	00:00:00	SEL	2	99.6 dB

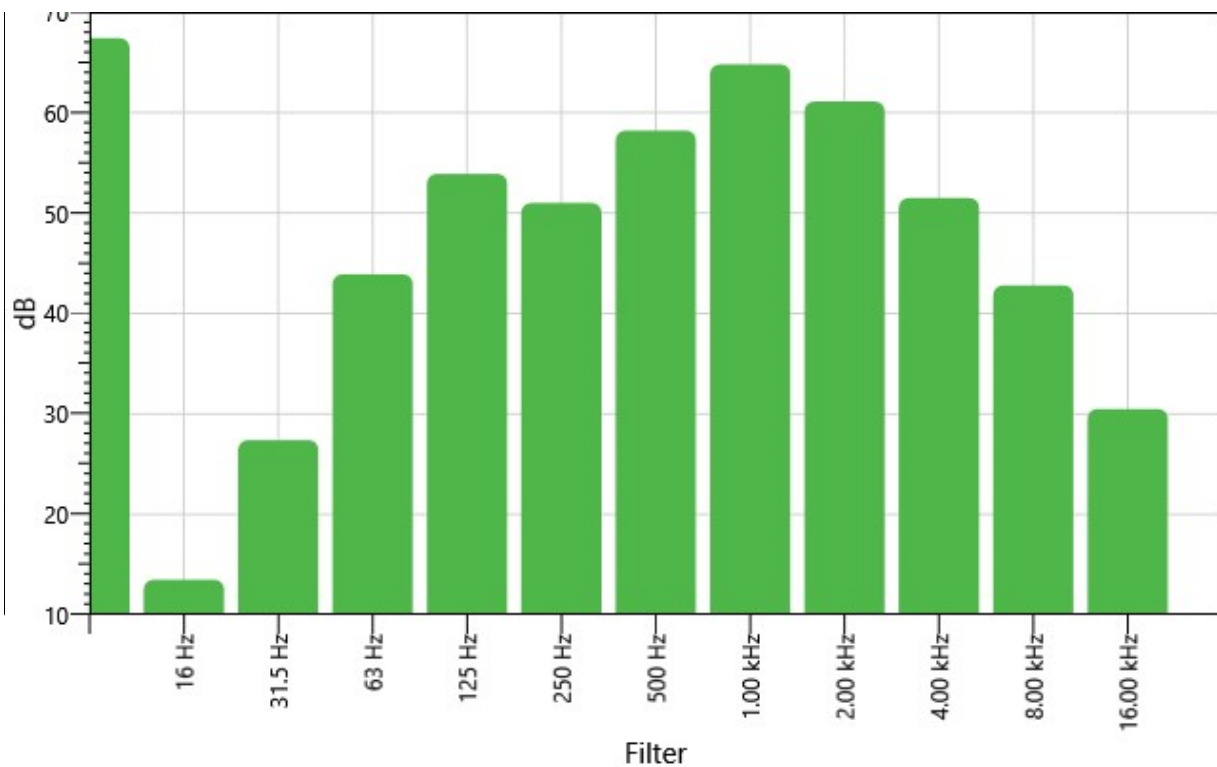
ProjectedTWA (1:00)	2	67.4 dB	Mntime	2	11/15/2022 9:54:36 AM
Mxtime	2	11/15/2022 9:44:12 AM	PKtime	2	11/15/2022 9:49:54 AM
Weighting	2	A	Range Ceiling	2	--
Criterion Level	2	85 dB	ULL	2	115 dB
Dynamic Range	2	--	Exchange Rate	2	3 dB
Response	2	FAST	Integrating Threshold	2	80 dB
Alarm Level 1	2	--	AlarmLevel2	2	--
Dosimeter Name	2	--			

Calibration History

Date	Calibration Action	Level	Cal. Model Type	Serial Number	Cert. Due Date
11/15/2022 8:21:35 AM	Calibration	114.0			

Filter Summary Chart

S003_BIJ090026_15112022_133133: Filter Summary Chart - Leq



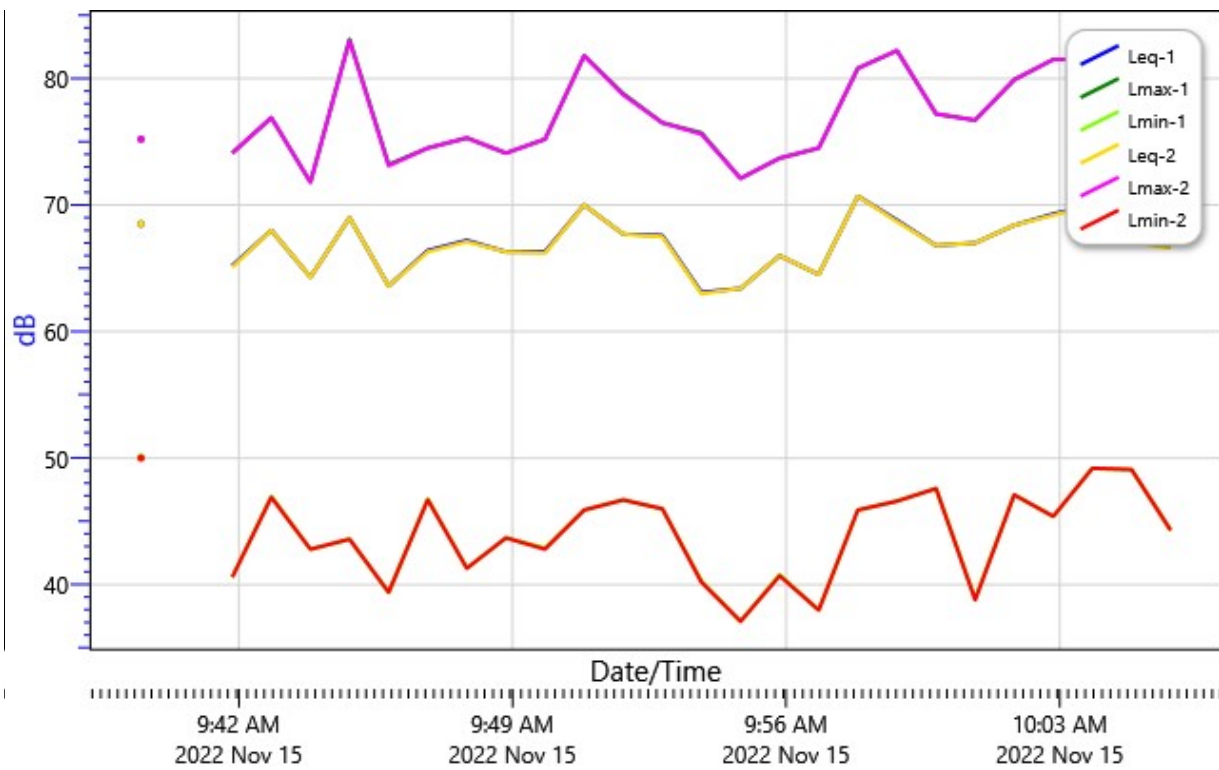
Filter Summary - Dose

Filter	Dose
	3228 %

16 Hz	0 %
31.5 Hz	0.3 %
63 Hz	14.3 %
125 Hz	141.8 %
250 Hz	72.7 %
500 Hz	382.2 %
1.00 kHz	1752.8 %
2.00 kHz	743.1 %
4.00 kHz	81.3 %
8.00 kHz	11 %
16.00 kHz	0.6 %

Logged Data Chart

S003_BIU090026_15112022_133133: Logged Data Chart - Read Only



General Information

Name	Study 1
Comments	
Start Time	11/15/2022 9:38:30 AM
Stop Time	11/15/2022 9:40:08 AM
Run Time	00:01:38
Model Type	
Serial Number	
Device Firmware Rev	
CompanyName	
Description	
Location	
User Name	

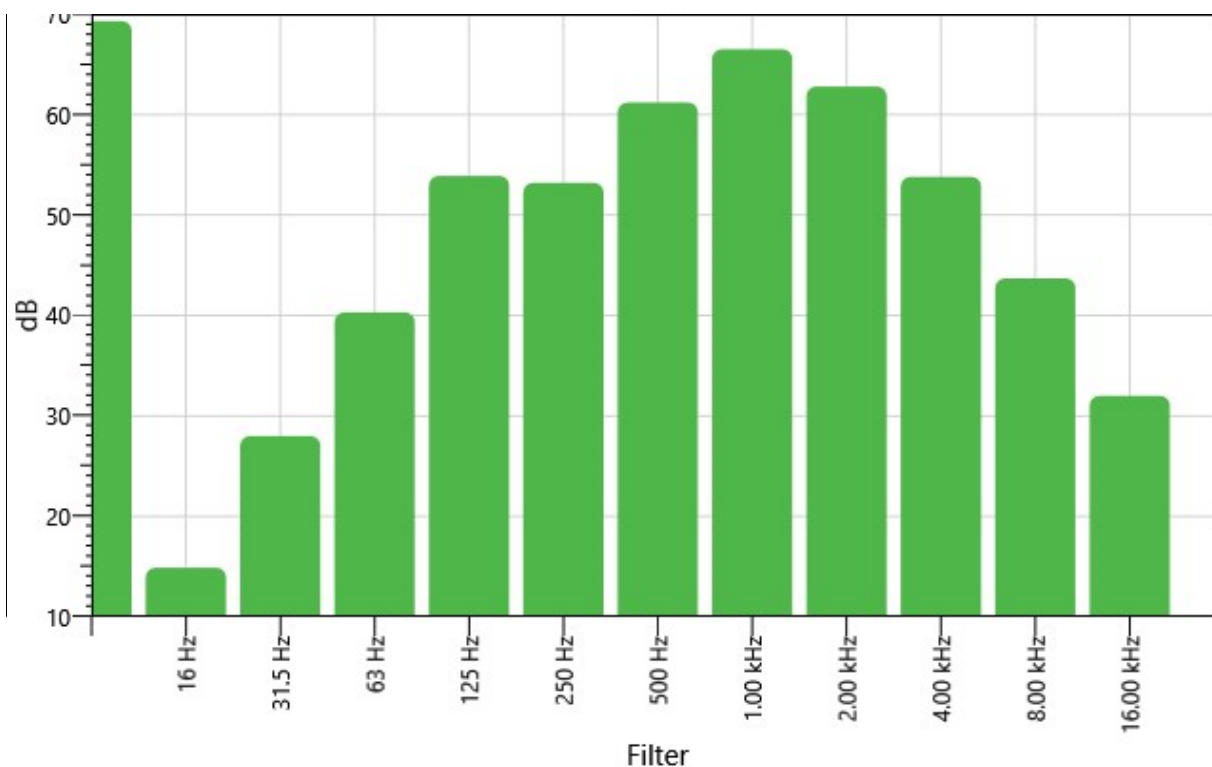
Summary Data

<u>Description</u>	<u>Meter</u>	<u>Value</u>	<u>Description</u>	<u>Meter</u>	<u>Value</u>
Dose	1	293.4 %	Pdose (1:00)	1	9999.9 %
Lavg	1	--	Lpk	1	91.1 dB
Leq	1	69.3 dB	TWA	1	44.6 dB
UL Time	1	00:00:00	SEL	1	89.2 dB
ProjectedTWA (1:00)	1	60.3 dB	Mntime	1	11/15/2022 9:39:40 AM
Mxtime	1	11/15/2022 9:39:50 AM	PKtime	1	11/15/2022 9:39:17 AM
Weighting	1	--	Range Ceiling	1	--
Criterion Level	1	--	ULL	1	--
Dynamic Range	1	--	Exchange Rate	1	--
Response	1	--	Int Threshold	1	--
Alarm Level 1	1	--	AlarmLevel2	1	--
Dosimeter Name	1	--			
Dose	2	0 %	Pdose (1:00)	2	2.7 %
Lavg	2	--	Lpk	2	91.1 dB
Leq	2	69.3 dB	TWA	2	44.6 dB
UL Time	2	00:00:00	SEL	2	89.2 dB
ProjectedTWA (1:00)	2	69.3 dB	Mntime	2	11/15/2022 9:39:40 AM
Mxtime	2	11/15/2022 9:39:50 AM	PKtime	2	11/15/2022 9:39:17 AM

Weighting	2	A	Range Ceiling	2	--
Criterion Level	2	85 dB	ULL	2	115 dB
Dynamic Range	2	--	Exchange Rate	2	3 dB
Response	2	FAST	Integrating Threshold	2	80 dB
Alarm Level 1	2	--	AlarmLevel2	2	--
Dosimeter Name	2	--			

Filter Summary Chart

Study 1: Filter Summary Chart - Leq



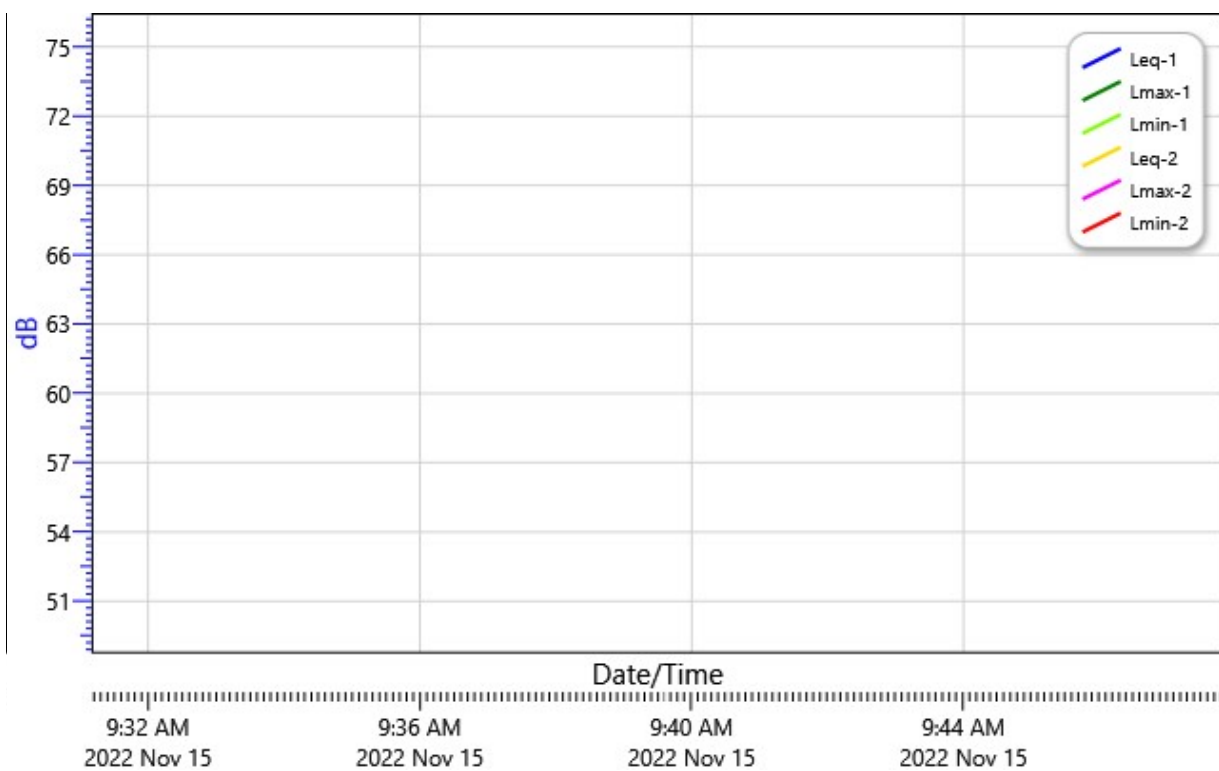
Filter Summary - Dose

Filter	Dose
	293.4 %
16 Hz	0 %
31.5 Hz	0 %
63 Hz	0.4 %
125 Hz	8.4 %
250 Hz	7.2 %
500 Hz	45.4 %
1.00 kHz	155.3 %

2.00 kHz	65 %
4.00 kHz	8.2 %
8.00 kHz	0.8 %
16.00 kHz	0.1 %

Logged Data Chart

Study 1: Logged Data Chart - Read Only



General Information

Name	Study 2
Comments	
Start Time	11/15/2022 9:40:50 AM
Stop Time	11/15/2022 10:06:46 AM
Run Time	00:25:56
Model Type	
Serial Number	
Device Firmware Rev	
CompanyName	
Description	
Location	
User Name	

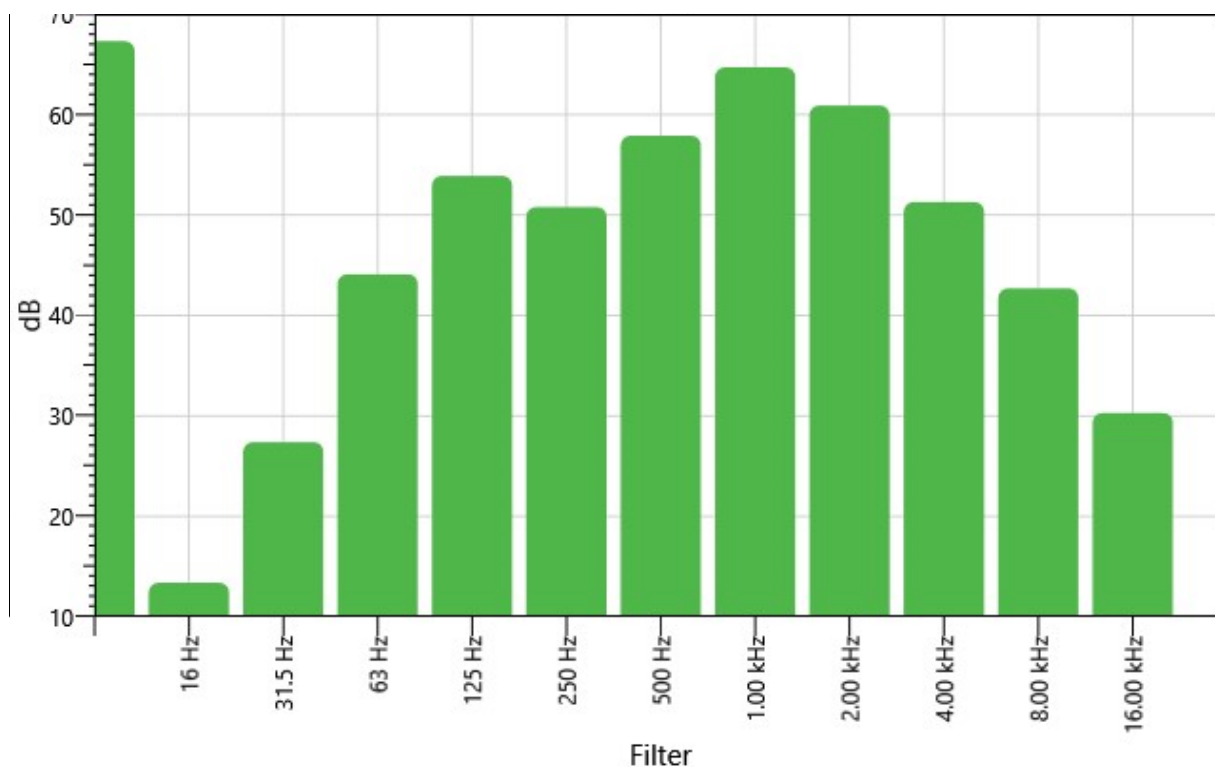
Summary Data

<u>Description</u>	<u>Meter</u>	<u>Value</u>	<u>Description</u>	<u>Meter</u>	<u>Value</u>
Dose	1	2934.5 %	Pdose (1:00)	1	6789.4 %
Lavg	1	--	Lpk	1	94 dB
Leq	1	67.3 dB	TWA	1	54.6 dB
UL Time	1	00:00:00	SEL	1	99.2 dB
ProjectedTWA (1:00)	1	58.3 dB	Mntime	1	11/15/2022 9:54:36 AM
Mxtime	1	11/15/2022 9:44:12 AM	PKtime	1	11/15/2022 9:49:54 AM
Weighting	1	--	Range Ceiling	1	--
Criterion Level	1	--	ULL	1	--
Dynamic Range	1	--	Exchange Rate	1	--
Response	1	--	Int Threshold	1	--
Alarm Level 1	1	--	AlarmLevel2	1	--
Dosimeter Name	1	--			
Dose	2	0.1 %	Pdose (1:00)	2	1.7 %
Lavg	2	--	Lpk	2	94 dB
Leq	2	67.3 dB	TWA	2	54.6 dB
UL Time	2	00:00:00	SEL	2	99.2 dB
ProjectedTWA (1:00)	2	67.3 dB	Mntime	2	11/15/2022 9:54:36 AM
Mxtime	2	11/15/2022 9:44:12 AM	PKtime	2	11/15/2022 9:49:54 AM

Weighting	2	A	Range Ceiling	2	--
Criterion Level	2	85 dB	ULL	2	115 dB
Dynamic Range	2	--	Exchange Rate	2	3 dB
Response	2	FAST	Integrating Threshold	2	80 dB
Alarm Level 1	2	--	AlarmLevel2	2	--
Dosimeter Name	2	--			

Filter Summary Chart

Study 2: Filter Summary Chart - Leq



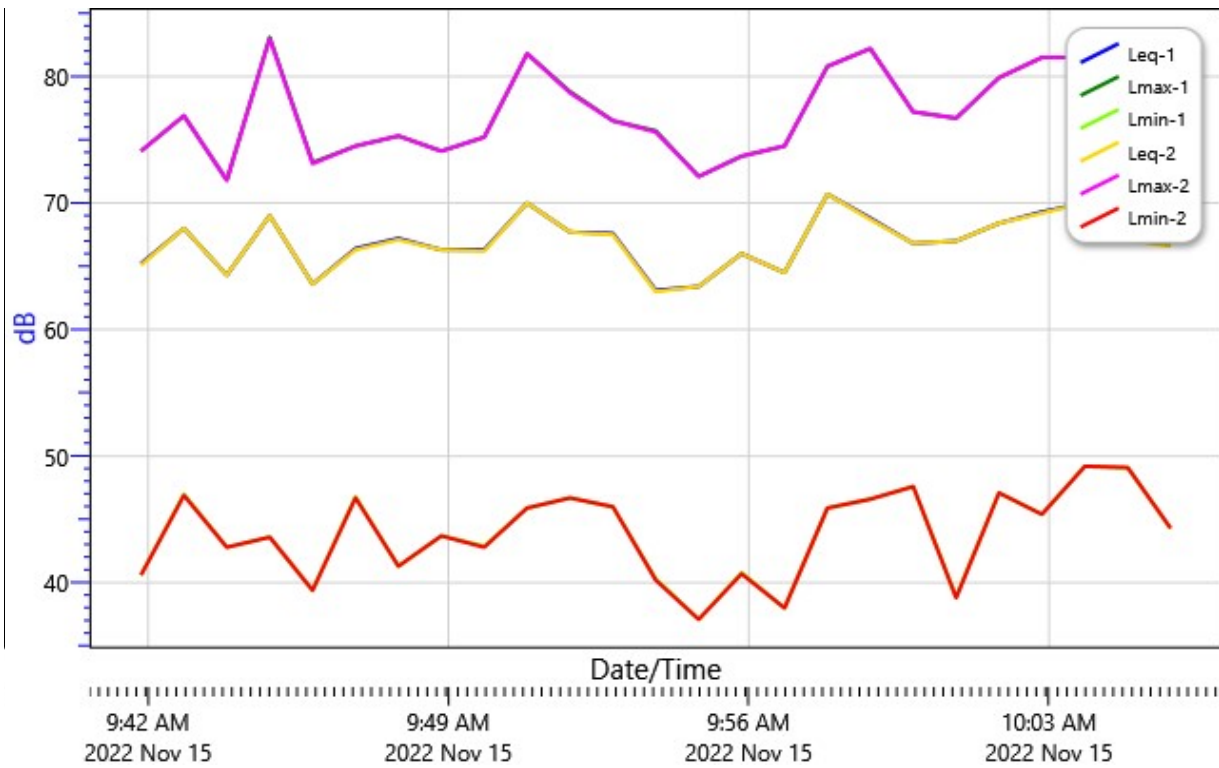
Filter Summary - Dose

Filter	Dose
	2934.5 %
16 Hz	0 %
31.5 Hz	0.3 %
63 Hz	13.9 %
125 Hz	133.4 %
250 Hz	65.5 %
500 Hz	336.8 %
1.00 kHz	1597.6 %

2.00 kHz	678.1 %
4.00 kHz	73.1 %
8.00 kHz	10.2 %
16.00 kHz	0.6 %

Logged Data Chart

Study 2: Logged Data Chart - Read Only



Session Report

3/29/2023

General Information

Name S012_BIJ090026_28112022_104438

Comments

Start Time 11/23/2022 11:28:46 PM

Stop Time 11/24/2022 12:00:52 AM

Run Time 00:32:06

Model Type SoundPro DL

Serial Number BIJ090026

Device Firmware Rev R.13B

Company Name

Description

Location

User Name

Summary Data

<u>Description</u>	<u>Meter</u>	<u>Value</u>	<u>Description</u>	<u>Meter</u>	<u>Value</u>
Dose	1	691.2 %	Pdose (1:00)	1	1291.9 %
Lavg	1	--	Lpk	1	95.6 dB
Leq	1	60.1 dB	TWA	1	48.3 dB
UL Time	1	00:00:00	SEL	1	92.9 dB
ProjectedTWA (1:00)	1	51.1 dB	Mntime	1	11/23/2022 11:44:43 PM
Mxtime	1	11/23/2022 11:56:04 PM	PKtime	1	11/23/2022 11:56:04 PM
Weighting	1	--	Range Ceiling	1	--
Criterion Level	1	--	ULL	1	--
Dynamic Range	1	--	Exchange Rate	1	--
Response	1	--	Int Threshold	1	--
Alarm Level 1	1	--	AlarmLevel2	1	--
Dosimeter Name	1	--			
Dose	2	0 %	Pdose (1:00)	2	0.3 %
Lavg	2	--	Lpk	2	95.5 dB
Leq	2	60.1 dB	TWA	2	48.3 dB
UL Time	2	00:00:00	SEL	2	92.9 dB

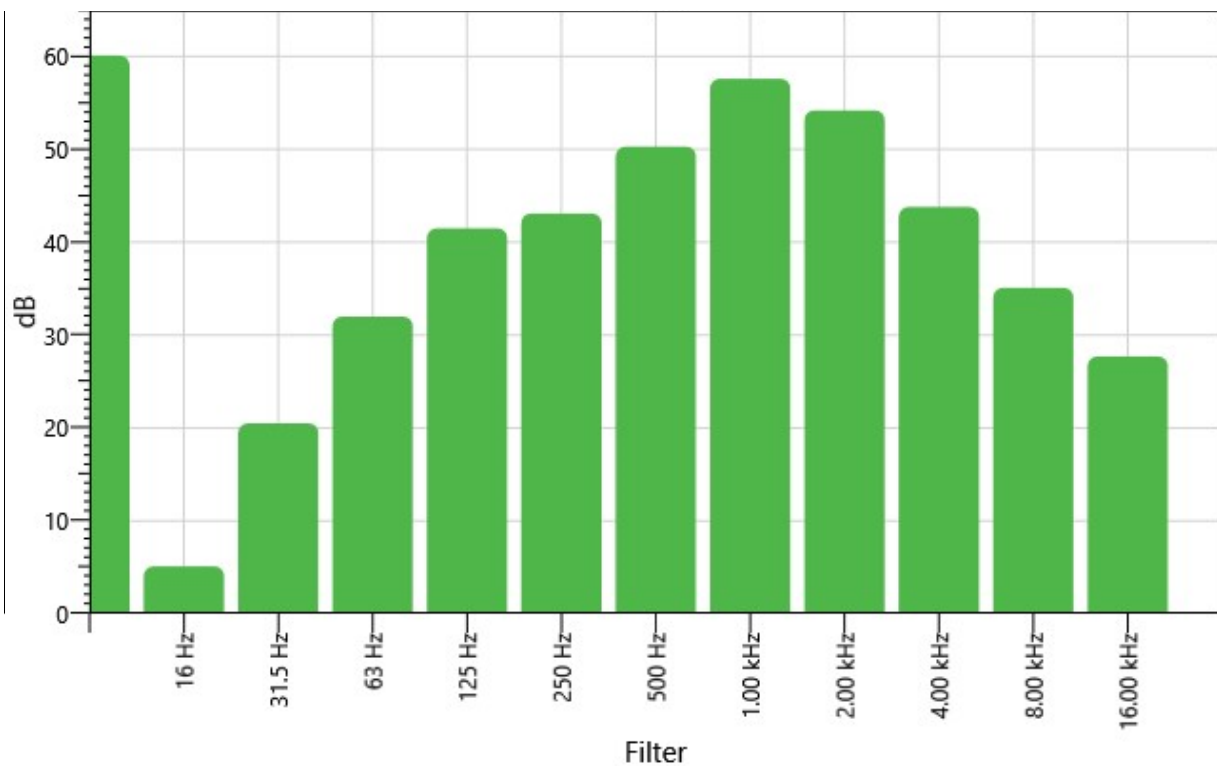
ProjectedTWA (1:00)	2	60.1 dB	Mntime	2	11/23/2022 11:44:43 PM
Mxtime	2	11/23/2022 11:56:04 PM	PKtime	2	11/23/2022 11:56:04 PM
Weighting	2	A	Range Ceiling	2	--
Criterion Level	2	85 dB	ULL	2	115 dB
Dynamic Range	2	--	Exchange Rate	2	3 dB
Response	2	FAST	Integrating Threshold	2	80 dB
Alarm Level 1	2	--	AlarmLevel2	2	--
Dosimeter Name	2	--			

Calibration History

Date	Calibration Action	Level	Cal. Model Type	Serial Number	Cert. Due Date
11/23/2022 PM	10:01:34 Calibration	114.0			

Filter Summary Chart

S012_BIU090026_28112022_104438: Filter Summary Chart - Leq



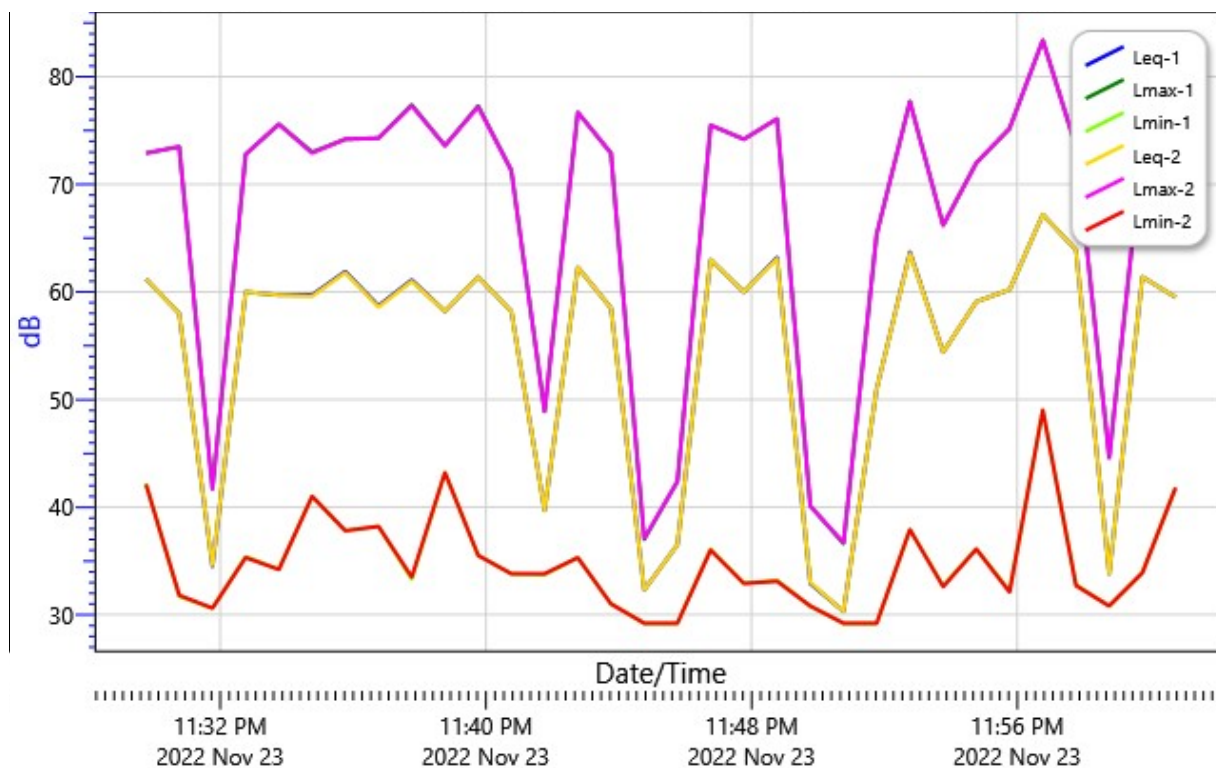
Filter Summary - Dose

Filter	Dose
--------	------

	691.2 %
16 Hz	0 %
31.5 Hz	0.1 %
63 Hz	1.1 %
125 Hz	9.5 %
250 Hz	13.7 %
500 Hz	72.3 %
1.00 kHz	392.5 %
2.00 kHz	177.7 %
4.00 kHz	16.1 %
8.00 kHz	2.2 %
16.00 kHz	0.4 %

Logged Data Chart

S012_BIU090026_28112022_104438: Logged Data Chart - Read Only



Session Report

3/29/2023

General Information

Name S004_BIJ090026_28112022_104346

Comments

Start Time 11/15/2022 10:22:08 AM

Stop Time 11/15/2022 10:58:13 AM

Run Time 00:35:03

Model Type SoundPro DL

Serial Number BIJ090026

Device Firmware Rev R.13B

Company Name

Description

Location

User Name

Summary Data

<u>Description</u>	<u>Meter</u>	<u>Value</u>	<u>Description</u>	<u>Meter</u>	<u>Value</u>
Dose	1	917.8 %	Pdose (1:00)	1	1571.1 %
Lavg	1	--	Lpk	1	94.4 dB
Leq	1	60.9 dB	TWA	1	49.6 dB
UL Time	1	00:00:00	SEL	1	94.2 dB
ProjectedTWA (1:00)	1	51.9 dB	Mntime	1	11/15/2022 10:50:12 AM
Mxtime	1	11/15/2022 10:39:59 AM	PKtime	1	11/15/2022 10:43:26 AM
Weighting	1	--	Range Ceiling	1	--
Criterion Level	1	--	ULL	1	--
Dynamic Range	1	--	Exchange Rate	1	--
Response	1	--	Int Threshold	1	--
Alarm Level 1	1	--	AlarmLevel2	1	--
Dosimeter Name	1	--			
Dose	2	0 %	Pdose (1:00)	2	0.4 %
Lavg	2	--	Lpk	2	94.4 dB
Leq	2	60.9 dB	TWA	2	49.6 dB
UL Time	2	00:00:00	SEL	2	94.1 dB

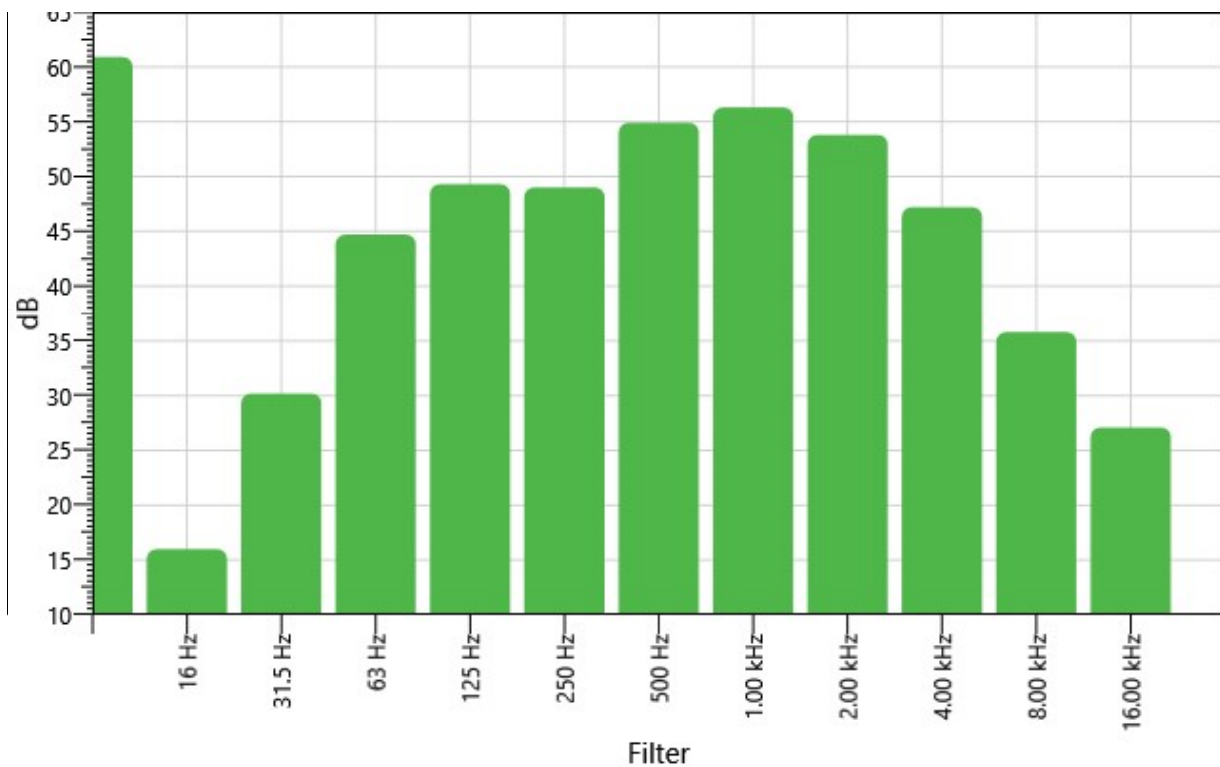
ProjectedTWA (1:00)	2	60.9 dB	Mntime	2	11/15/2022 10:50:09 AM
Mxtime	2	11/15/2022 10:39:59 AM	PKtime	2	11/15/2022 10:43:26 AM
Weighting	2	A	Range Ceiling	2	--
Criterion Level	2	85 dB	ULL	2	115 dB
Dynamic Range	2	--	Exchange Rate	2	3 dB
Response	2	FAST	Integrating Threshold	2	80 dB
Alarm Level 1	2	--	AlarmLevel2	2	--
Dosimeter Name	2	--			

Calibration History

Date	Calibration Action	Level	Cal. Model Type	Serial Number	Cert. Due Date
11/15/2022 8:21:35 AM	Calibration	114.0			

Filter Summary Chart

S004_BIJ090026_28112022_104346: Filter Summary Chart - Leq



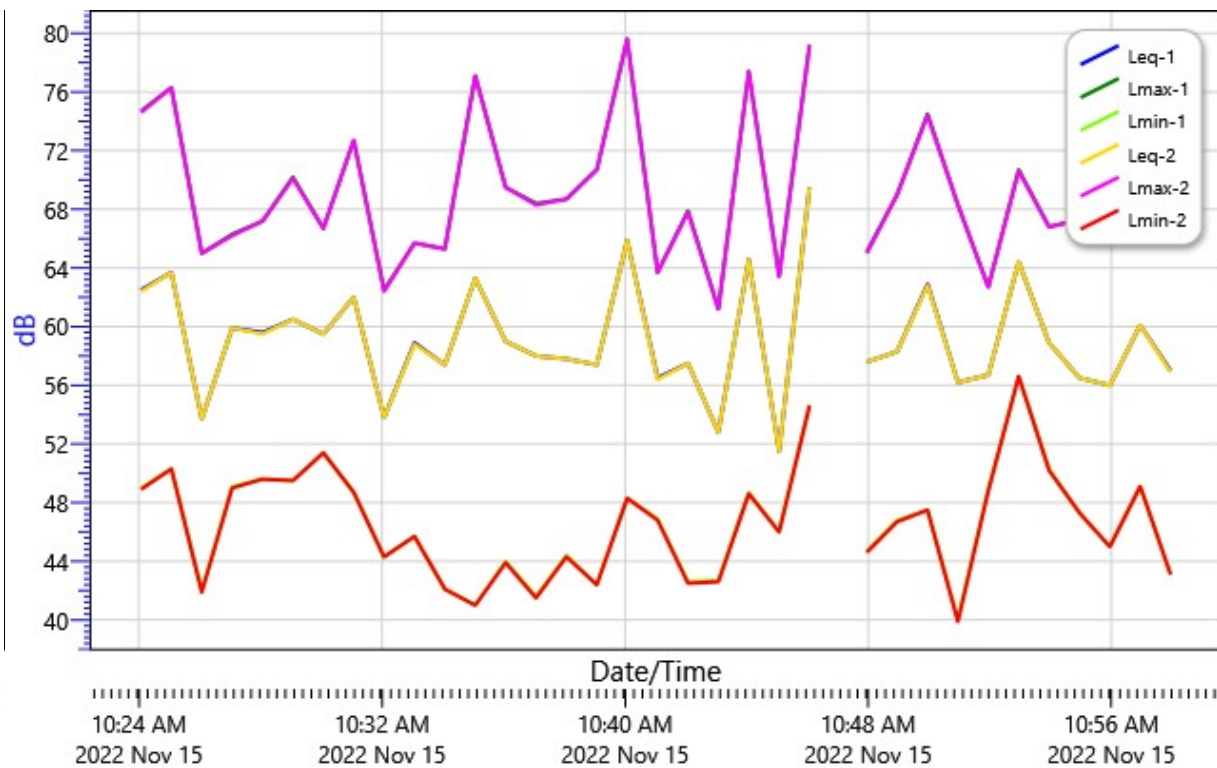
Filter Summary - Dose

Filter	Dose
	917.8 %

16 Hz	0 %
31.5 Hz	0.8 %
63 Hz	21.6 %
125 Hz	63.6 %
250 Hz	58.4 %
500 Hz	227 %
1.00 kHz	317.4 %
2.00 kHz	179 %
4.00 kHz	38.3 %
8.00 kHz	2.8 %
16.00 kHz	0.4 %

Logged Data Chart

S004_BIU090026_28112022_104346: Logged Data Chart - Read Only



Session Report

3/29/2023

General Information

Name S010_BIJ090026_28112022_104423

Comments

Start Time 11/23/2022 10:03:51 PM

Stop Time 11/23/2022 10:35:03 PM

Run Time 00:31:12

Model Type SoundPro DL

Serial Number BIJ090026

Device Firmware Rev R.13B

Company Name

Description

Location

User Name

Summary Data

<u>Description</u>	<u>Meter</u>	<u>Value</u>	<u>Description</u>	<u>Meter</u>	<u>Value</u>
Dose	1	160.4 %	Pdose (1:00)	1	308.6 %
Lavg	1	--	Lpk	1	81.3 dB
Leq	1	53.9 dB	TWA	1	42 dB
UL Time	1	00:00:00	SEL	1	86.6 dB
ProjectedTWA (1:00)	1	44.8 dB	Mntime	1	11/23/2022 10:21:44 PM
Mxtime	1	11/23/2022 10:16:45 PM	PKtime	1	11/23/2022 10:16:58 PM
Weighting	1	--	Range Ceiling	1	--
Criterion Level	1	--	ULL	1	--
Dynamic Range	1	--	Exchange Rate	1	--
Response	1	--	Int Threshold	1	--
Alarm Level 1	1	--	AlarmLevel2	1	--
Dosimeter Name	1	--			
Dose	2	0 %	Pdose (1:00)	2	0.1 %
Lavg	2	--	Lpk	2	81.2 dB
Leq	2	53.8 dB	TWA	2	42 dB
UL Time	2	00:00:00	SEL	2	86.6 dB

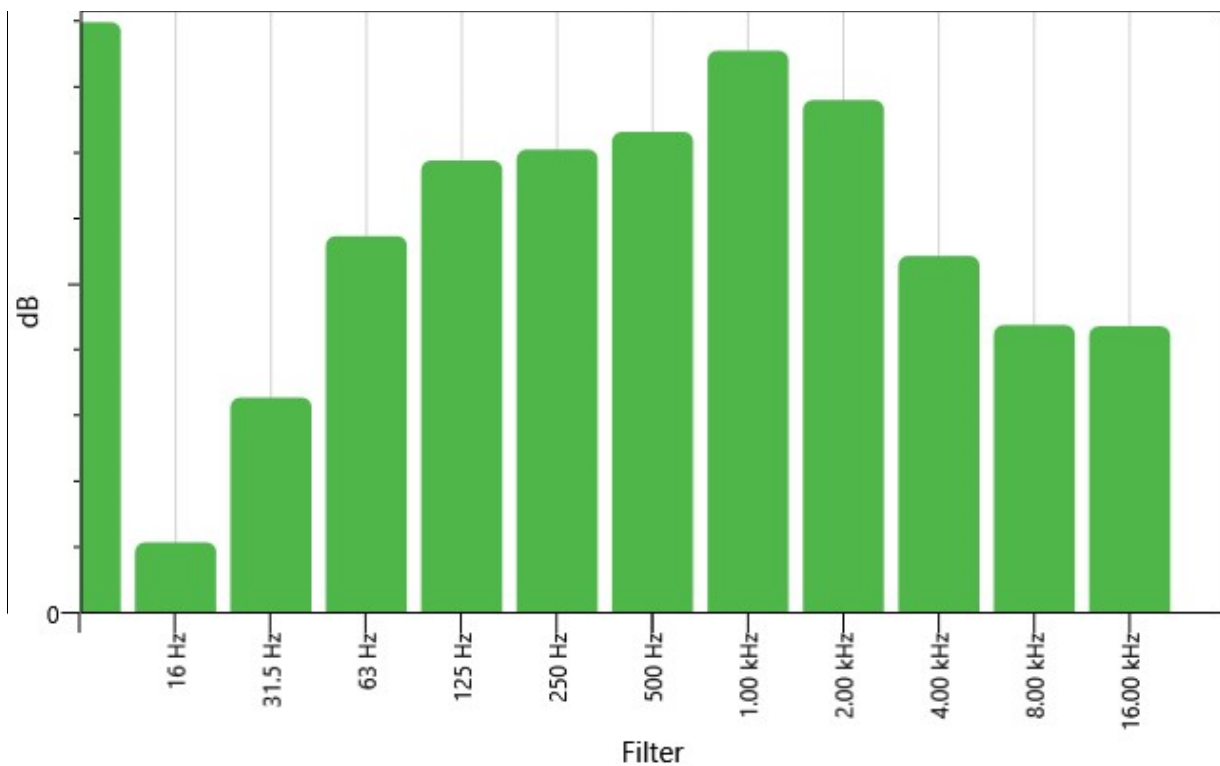
ProjectedTWA (1:00)	2	53.8 dB	Mntime	2	11/23/2022 10:21:44 PM
Mxtime	2	11/23/2022 10:16:45 PM	PKtime	2	11/23/2022 10:16:58 PM
Weighting	2	A	Range Ceiling	2	--
Criterion Level	2	85 dB	ULL	2	115 dB
Dynamic Range	2	--	Exchange Rate	2	3 dB
Response	2	FAST	Integrating Threshold	2	80 dB
Alarm Level 1	2	--	AlarmLevel2	2	--
Dosimeter Name	2	--			

Calibration History

Date	Calibration Action	Level	Cal. Model Type	Serial Number	Cert. Due Date
11/23/2022 PM	10:01:34 Calibration	114.0			

Filter Summary Chart

S010_BIU090026_28112022_104423: Filter Summary Chart - Leq



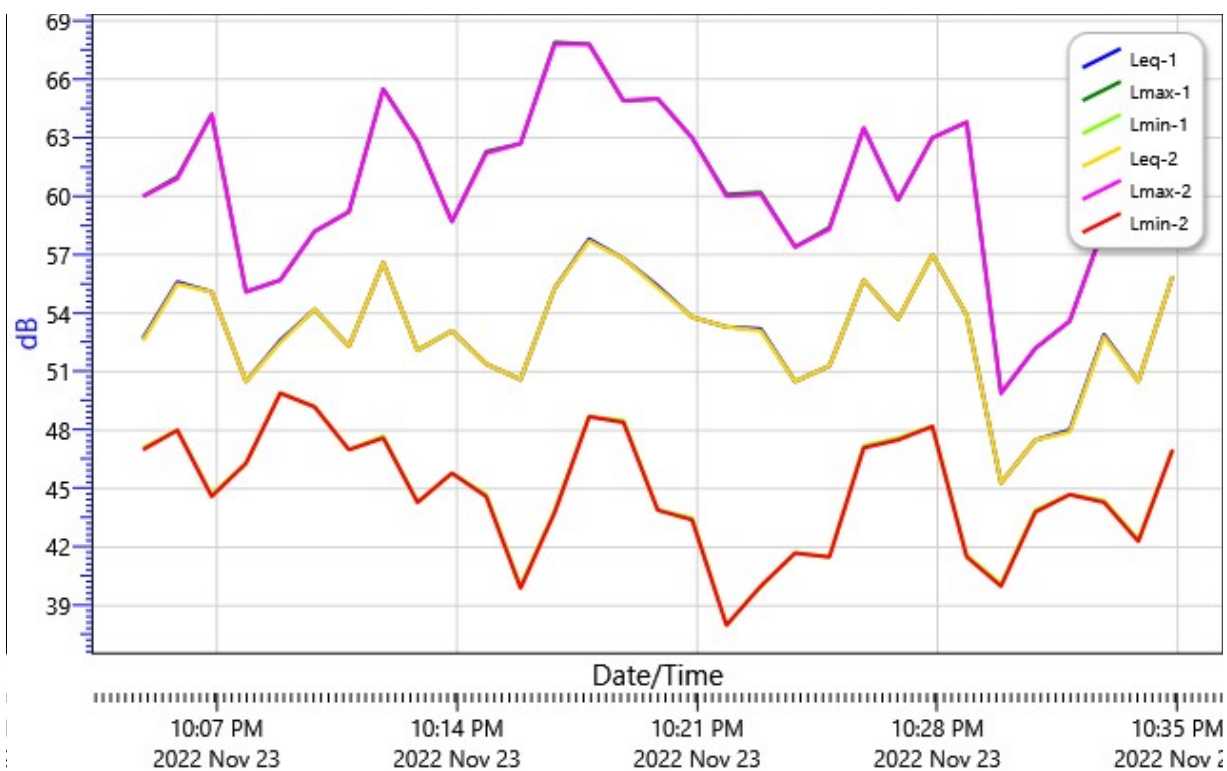
Filter Summary - Dose

Filter	Dose
--------	------

	160.4 %
16 Hz	0 %
31.5 Hz	0.1 %
63 Hz	1.8 %
125 Hz	9 %
250 Hz	11.1 %
500 Hz	16 %
1.00 kHz	88.4 %
2.00 kHz	31.5 %
4.00 kHz	1.2 %
8.00 kHz	0.3 %
16.00 kHz	0.3 %

Logged Data Chart

S010_BIU090026_28112022_104423: Logged Data Chart - Read Only



Session Report

3/29/2023

General Information

Name S007_BIJ090026_28112022_104402

Comments

Start Time 11/15/2022 5:03:20 PM

Stop Time 11/15/2022 5:33:26 PM

Run Time 00:30:06

Model Type SoundPro DL

Serial Number BIJ090026

Device Firmware Rev R.13B

Company Name

Description

Location

User Name

Summary Data

Description	Meter	Value	Description	Meter	Value
Dose	1	218.6 %	Pdose (1:00)	1	435.8 %
Lavg	1	--	Lpk	1	88.7 dB
Leq	1	55.4 dB	TWA	1	43.3 dB
UL Time	1	00:00:00	SEL	1	87.9 dB
ProjectedTWA (1:00)	1	46.3 dB	Mntime	1	11/15/2022 5:27:22 PM
Mxtime	1	11/15/2022 5:05:15 PM	PKtime	1	11/15/2022 5:05:15 PM
Weighting	1	--	Range Ceiling	1	--
Criterion Level	1	--	ULL	1	--
Dynamic Range	1	--	Exchange Rate	1	--
Response	1	--	Int Threshold	1	--
Alarm Level 1	1	--	AlarmLevel2	1	--
Dosimeter Name	1	--			
Dose	2	0 %	Pdose (1:00)	2	0.1 %
Lavg	2	--	Lpk	2	88.7 dB
Leq	2	55.3 dB	TWA	2	43.3 dB
UL Time	2	00:00:00	SEL	2	87.9 dB

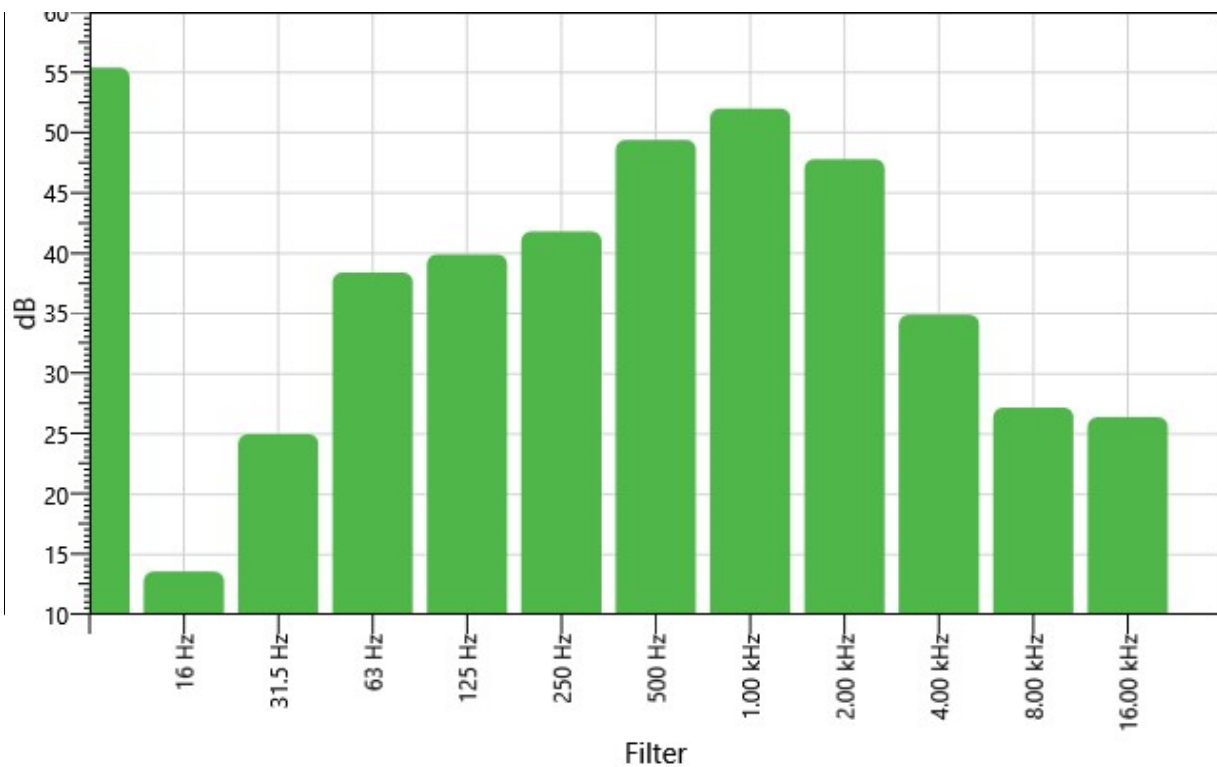
ProjectedTWA (1:00)	2	55.3 dB	Mntime	2	11/15/2022 5:27:22 PM
Mxtime	2	11/15/2022 5:05:15 PM	PKtime	2	11/15/2022 5:05:15 PM
Weighting	2	A	Range Ceiling	2	--
Criterion Level	2	85 dB	ULL	2	115 dB
Dynamic Range	2	--	Exchange Rate	2	3 dB
Response	2	FAST	Integrating Threshold	2	80 dB
Alarm Level 1	2	--	AlarmLevel2	2	--
Dosimeter Name	2	--			

Calibration History

Date	Calibration Action	Level	Cal. Model Type	Serial Number	Cert. Due Date
11/15/2022 8:21:35 AM	Calibration	114.0			

Filter Summary Chart

S007_BIJ090026_28112022_104402: Filter Summary Chart - Leq



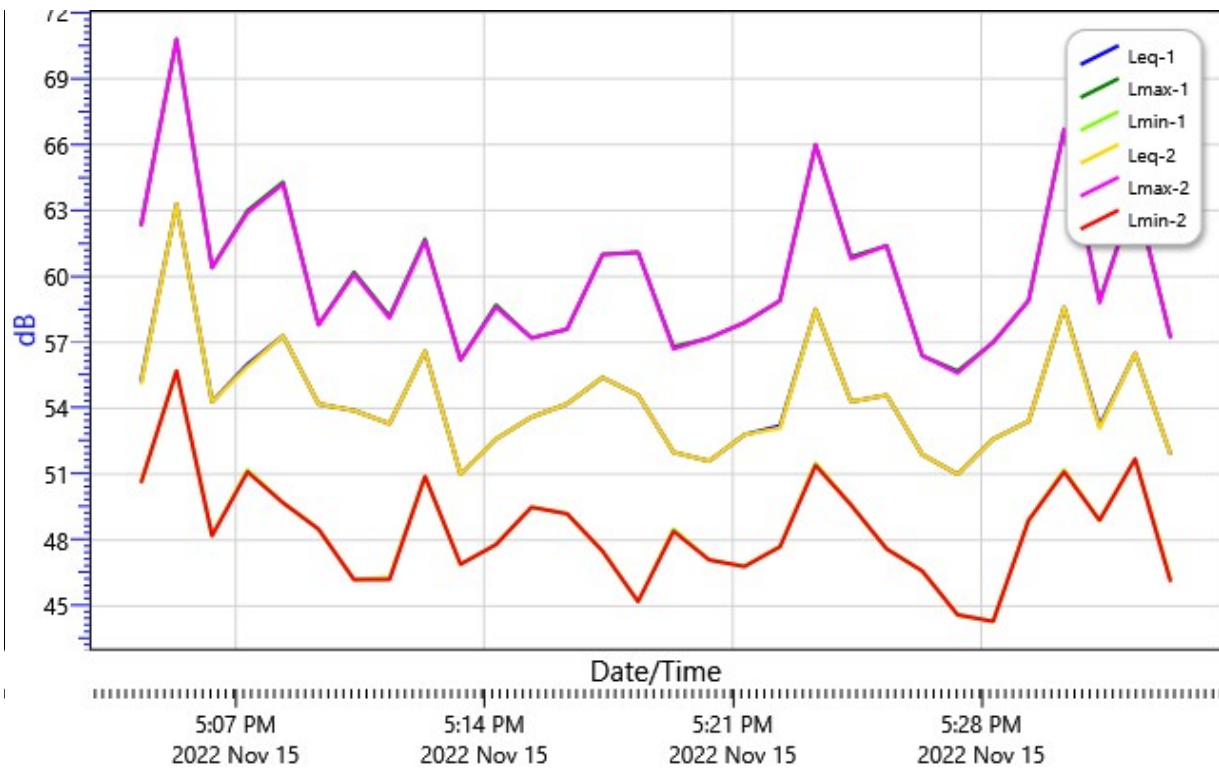
Filter Summary - Dose

Filter	Dose
	218.6 %

16 Hz	0 %
31.5 Hz	0.2 %
63 Hz	4.4 %
125 Hz	6.2 %
250 Hz	9.6 %
500 Hz	55.7 %
1.00 kHz	100.5 %
2.00 kHz	37.9 %
4.00 kHz	2 %
8.00 kHz	0.3 %
16.00 kHz	0.3 %

Logged Data Chart

S007_BIU090026_28112022_104402: Logged Data Chart - Read Only



Session Report

3/29/2023

General Information

Name S001_BIJ090026_15112022_133122

Comments

Start Time 11/15/2022 8:24:52 AM

Stop Time 11/15/2022 8:58:18 AM

Run Time 00:33:26

Model Type SoundPro DL

Serial Number BIJ090026

Device Firmware Rev R.13B

Company Name

Description

Location

User Name

Summary Data

Description	Meter	Value	Description	Meter	Value
Dose	1	529 %	Pdose (1:00)	1	949.4 %
Lavg	1	--	Lpk	1	85.9 dB
Leq	1	58.8 dB	TWA	1	47.2 dB
UL Time	1	00:00:00	SEL	1	91.8 dB
ProjectedTWA (1:00)	1	49.7 dB	Mntime	1	11/15/2022 8:47:24 AM
Mxtime	1	11/15/2022 8:29:40 AM	PKtime	1	11/15/2022 8:24:56 AM
Weighting	1	--	Range Ceiling	1	--
Criterion Level	1	--	ULL	1	--
Dynamic Range	1	--	Exchange Rate	1	--
Response	1	--	Int Threshold	1	--
Alarm Level 1	1	--	AlarmLevel2	1	--
Dosimeter Name	1	--			
Dose	2	0 %	Pdose (1:00)	2	0.2 %
Lavg	2	--	Lpk	2	85.9 dB
Leq	2	58.7 dB	TWA	2	47.2 dB
UL Time	2	00:00:00	SEL	2	91.7 dB

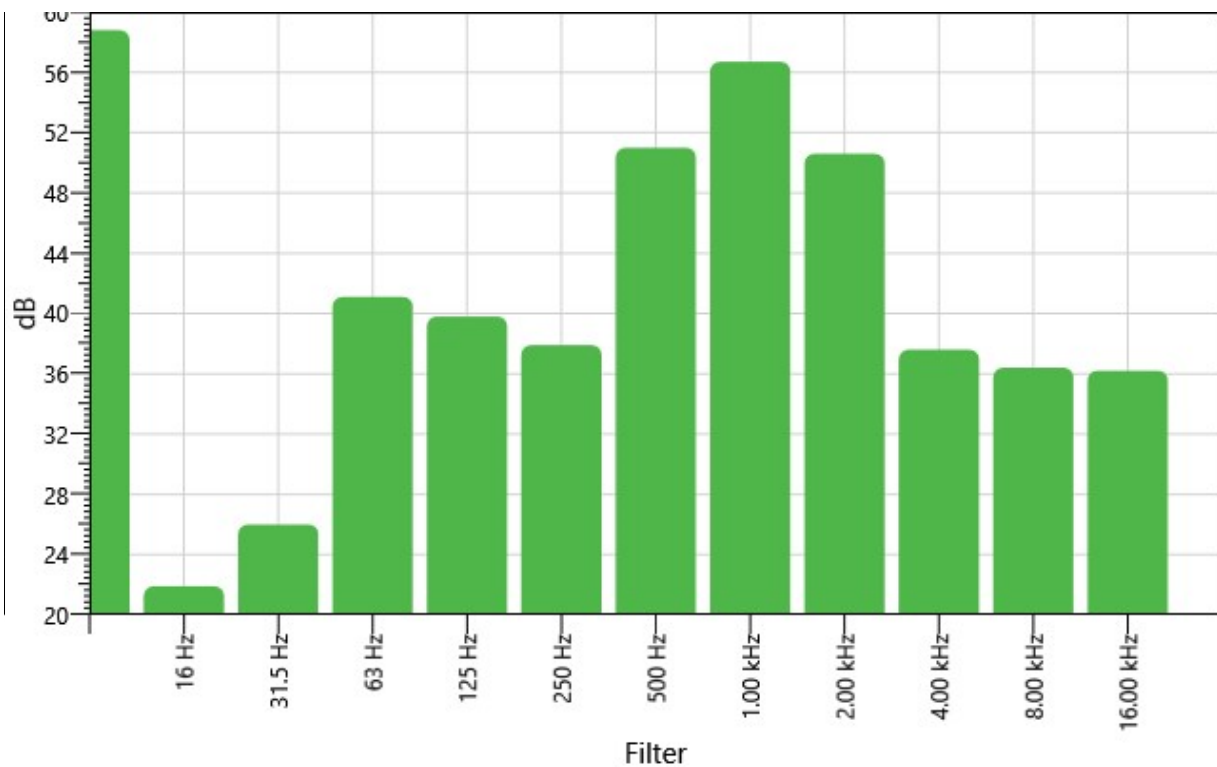
ProjectedTWA (1:00)	2	58.7 dB	Mntime	2	11/15/2022 8:47:24 AM
Mxtime	2	11/15/2022 8:29:40 AM	PKtime	2	11/15/2022 8:24:56 AM
Weighting	2	A	Range Ceiling	2	--
Criterion Level	2	85 dB	ULL	2	115 dB
Dynamic Range	2	--	Exchange Rate	2	3 dB
Response	2	FAST	Integrating Threshold	2	80 dB
Alarm Level 1	2	--	AlarmLevel2	2	--
Dosimeter Name	2	--			

Calibration History

Date	Calibration Action	Level	Cal. Model Type	Serial Number	Cert. Due Date
11/15/2022 8:21:35 AM	Calibration	114.0			

Filter Summary Chart

S001_BIJ090026_15112022_133122: Filter Summary Chart - Leq



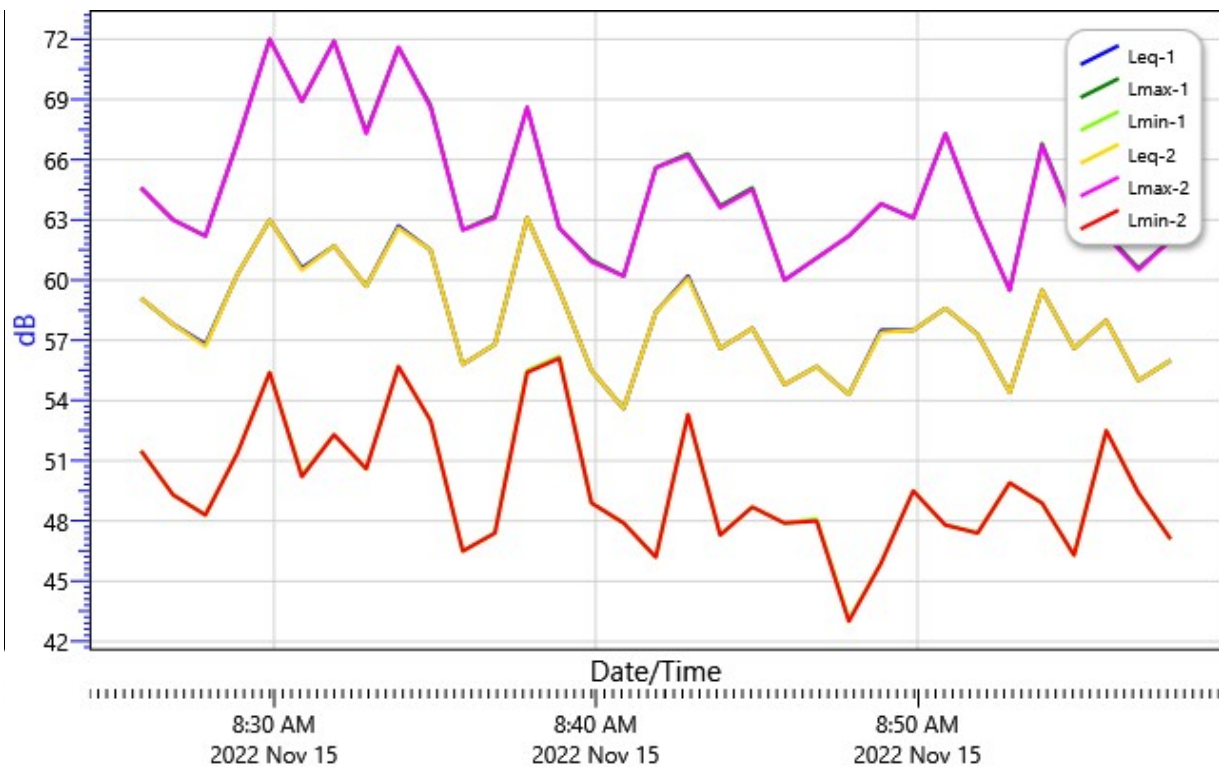
Filter Summary - Dose

Filter	Dose
	529 %

16 Hz	0.1 %
31.5 Hz	0.3 %
63 Hz	9 %
125 Hz	6.7 %
250 Hz	4.4 %
500 Hz	87.8 %
1.00 kHz	328.9 %
2.00 kHz	81.8 %
4.00 kHz	4.1 %
8.00 kHz	3.1 %
16.00 kHz	3 %

Logged Data Chart

S001_BIU090026_15112022_133122: Logged Data Chart - Read Only



Session Report

3/29/2023

General Information

Name S005_BIJ090026_28112022_104352

Comments

Start Time 11/15/2022 11:13:29 AM

Stop Time 11/15/2022 12:16:14 PM

Run Time 01:02:45

Model Type SoundPro DL

Serial Number BIJ090026

Device Firmware Rev R.13B

Company Name

Description

Location

User Name

Summary Data

<u>Description</u>	<u>Meter</u>	<u>Value</u>	<u>Description</u>	<u>Meter</u>	<u>Value</u>
Dose	1	382.9 %	Pdose (1:00)	1	366.1 %
Lavg	1	--	Lpk	1	85.2 dB
Leq	1	54.6 dB	TWA	1	45.8 dB
UL Time	1	00:00:00	SEL	1	90.4 dB
ProjectedTWA (1:00)	1	45.6 dB	Mntime	1	11/15/2022 11:19:45 AM
Mxtime	1	11/15/2022 12:02:53 PM	PKtime	1	11/15/2022 12:16:13 PM
Weighting	1	--	Range Ceiling	1	--
Criterion Level	1	--	ULL	1	--
Dynamic Range	1	--	Exchange Rate	1	--
Response	1	--	Int Threshold	1	--
Alarm Level 1	1	--	AlarmLevel2	1	--
Dosimeter Name	1	--			
Dose	2	0 %	Pdose (1:00)	2	0.1 %
Lavg	2	--	Lpk	2	85.2 dB
Leq	2	54.6 dB	TWA	2	45.8 dB
UL Time	2	00:00:00	SEL	2	90.3 dB

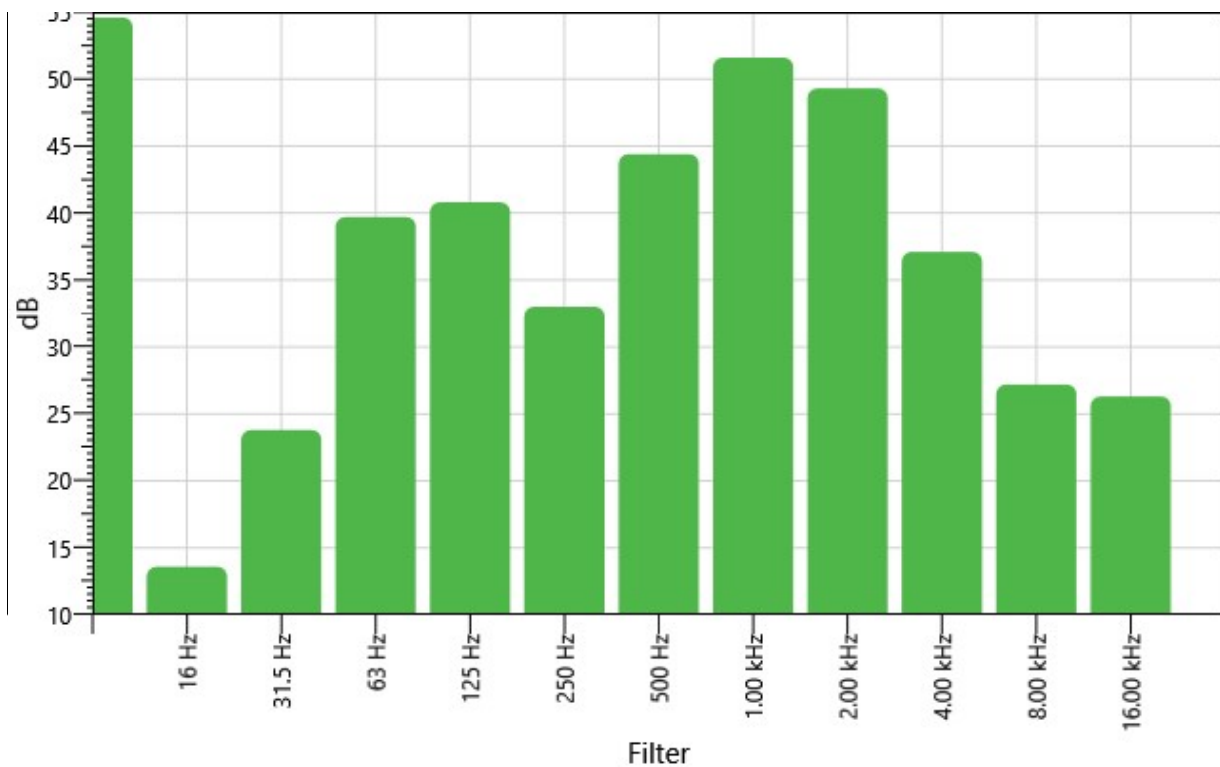
ProjectedTWA (1:00)	2	54.6 dB	Mntime	2	11/15/2022 11:19:44 AM
Mxtime	2	11/15/2022 12:02:53 PM	PKtime	2	11/15/2022 12:16:13 PM
Weighting	2	A	Range Ceiling	2	--
Criterion Level	2	85 dB	ULL	2	115 dB
Dynamic Range	2	--	Exchange Rate	2	3 dB
Response	2	FAST	Integrating Threshold	2	80 dB
Alarm Level 1	2	--	AlarmLevel2	2	--
Dosimeter Name	2	--			

Calibration History

Date	Calibration Action	Level	Cal. Model Type	Serial Number	Cert. Due Date
11/15/2022 8:21:35 AM	Calibration	114.0			

Filter Summary Chart

S005_BIJ090026_28112022_104352: Filter Summary Chart - Leq



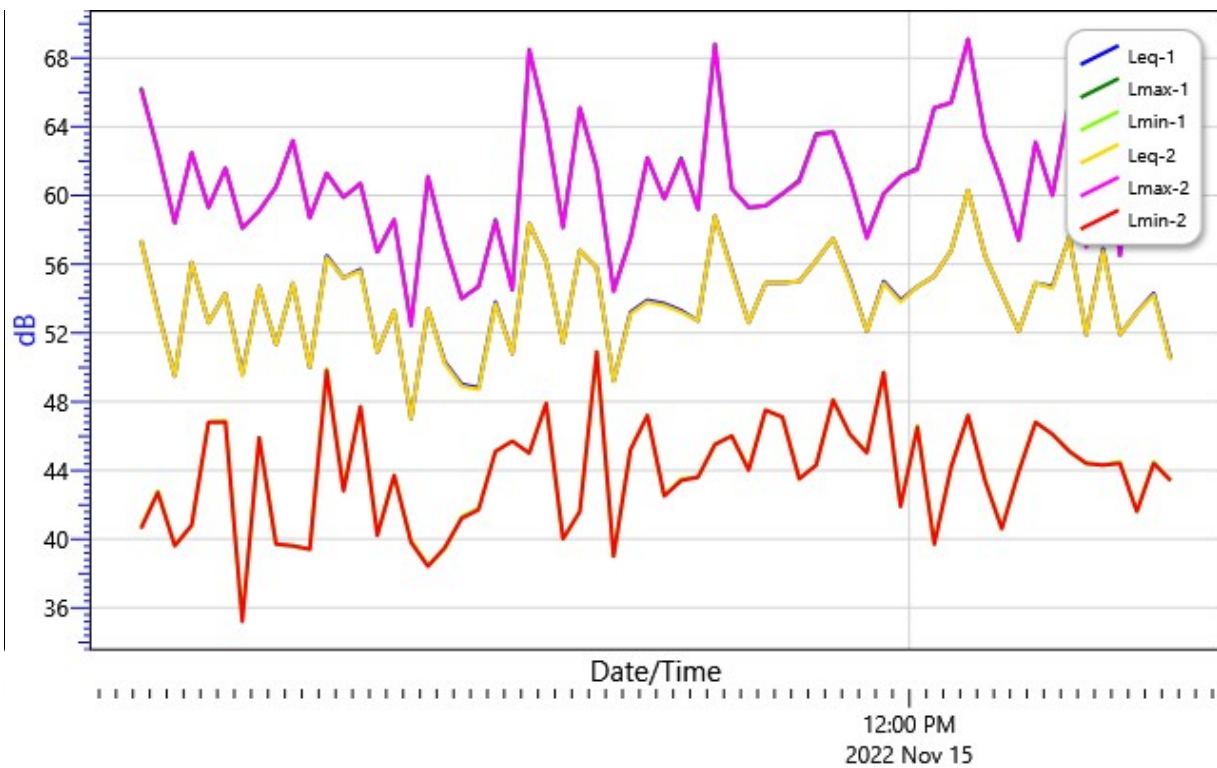
Filter Summary - Dose

Filter	Dose
	382.9 %

16 Hz	0 %
31.5 Hz	0.3 %
63 Hz	12.3 %
125 Hz	16 %
250 Hz	2.6 %
500 Hz	36.8 %
1.00 kHz	192.1 %
2.00 kHz	112.5 %
4.00 kHz	6.8 %
8.00 kHz	0.7 %
16.00 kHz	0.6 %

Logged Data Chart

S005_BIU090026_28112022_104352: Logged Data Chart - Read Only



Session Report

3/29/2023

General Information

Name S013_BIJ090026_28112022_104444

Comments

Start Time 11/24/2022 12:10:07 AM

Stop Time 11/24/2022 12:45:19 AM

Run Time 00:35:12

Model Type SoundPro DL

Serial Number BIJ090026

Device Firmware Rev R.13B

Company Name

Description

Location

User Name

Summary Data

Description	Meter	Value	Description	Meter	Value
Dose	1	79.3 %	Pdose (1:00)	1	135.2 %
Lavg	1	--	Lpk	1	85.8 dB
Leq	1	50.3 dB	TWA	1	38.9 dB
UL Time	1	00:00:00	SEL	1	83.5 dB
ProjectedTWA (1:00)	1	41.3 dB	Mntime	1	11/24/2022 12:12:44 AM
Mxtime	1	11/24/2022 12:37:33 AM	PKtime	1	11/24/2022 12:45:17 AM
Weighting	1	--	Range Ceiling	1	--
Criterion Level	1	--	ULL	1	--
Dynamic Range	1	--	Exchange Rate	1	--
Response	1	--	Int Threshold	1	--
Alarm Level 1	1	--	AlarmLevel2	1	--
Dosimeter Name	1	--			
Dose	2	0 %	Pdose (1:00)	2	0 %
Lavg	2	--	Lpk	2	85.8 dB
Leq	2	50.3 dB	TWA	2	38.9 dB
UL Time	2	00:00:00	SEL	2	83.5 dB

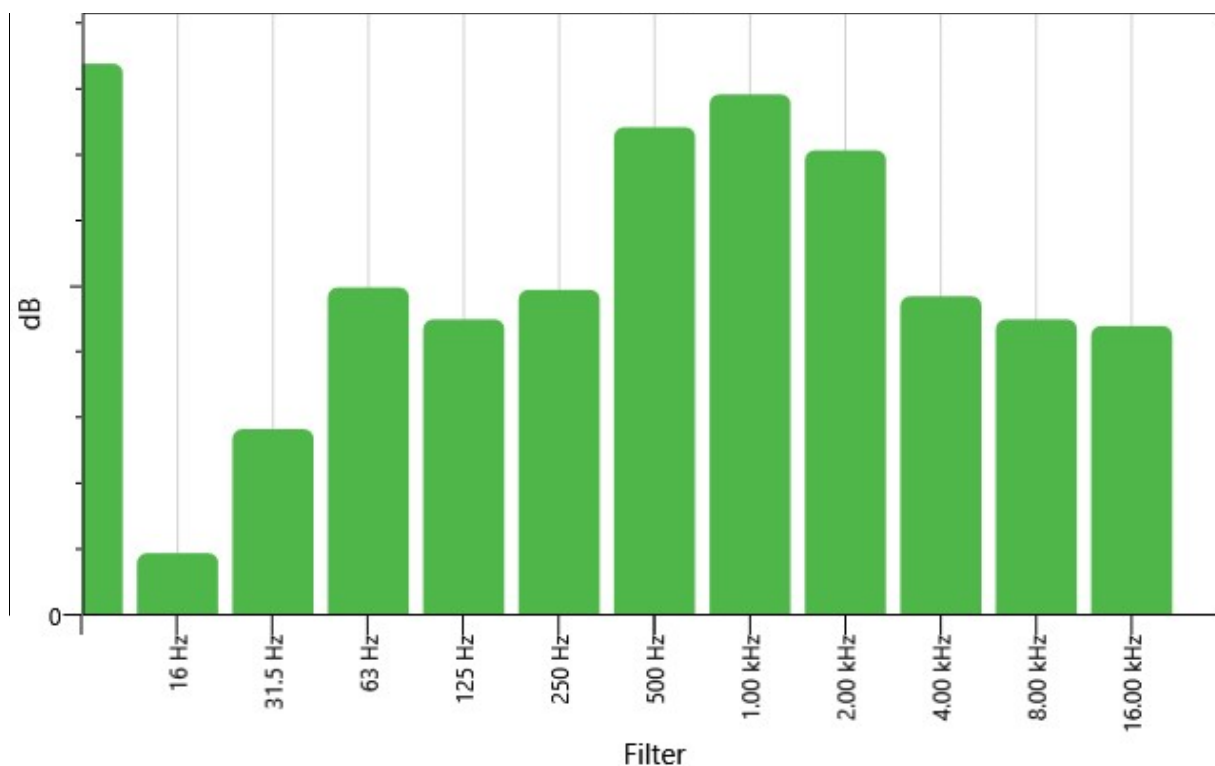
ProjectedTWA (1:00)	2	50.3 dB	Mntime	2	11/24/2022 12:12:44 AM
Mxtime	2	11/24/2022 12:37:33 AM	PKtime	2	11/24/2022 12:45:17 AM
Weighting	2	A	Range Ceiling	2	--
Criterion Level	2	85 dB	ULL	2	115 dB
Dynamic Range	2	--	Exchange Rate	2	3 dB
Response	2	FAST	Integrating Threshold	2	80 dB
Alarm Level 1	2	--	AlarmLevel2	2	--
Dosimeter Name	2	--			

Calibration History

Date	Calibration Action	Level	Cal. Model Type	Serial Number	Cert. Due Date
11/23/2022 PM	10:01:34 Calibration	114.0			

Filter Summary Chart

S013_BIU090026_28112022_104444: Filter Summary Chart - Leq



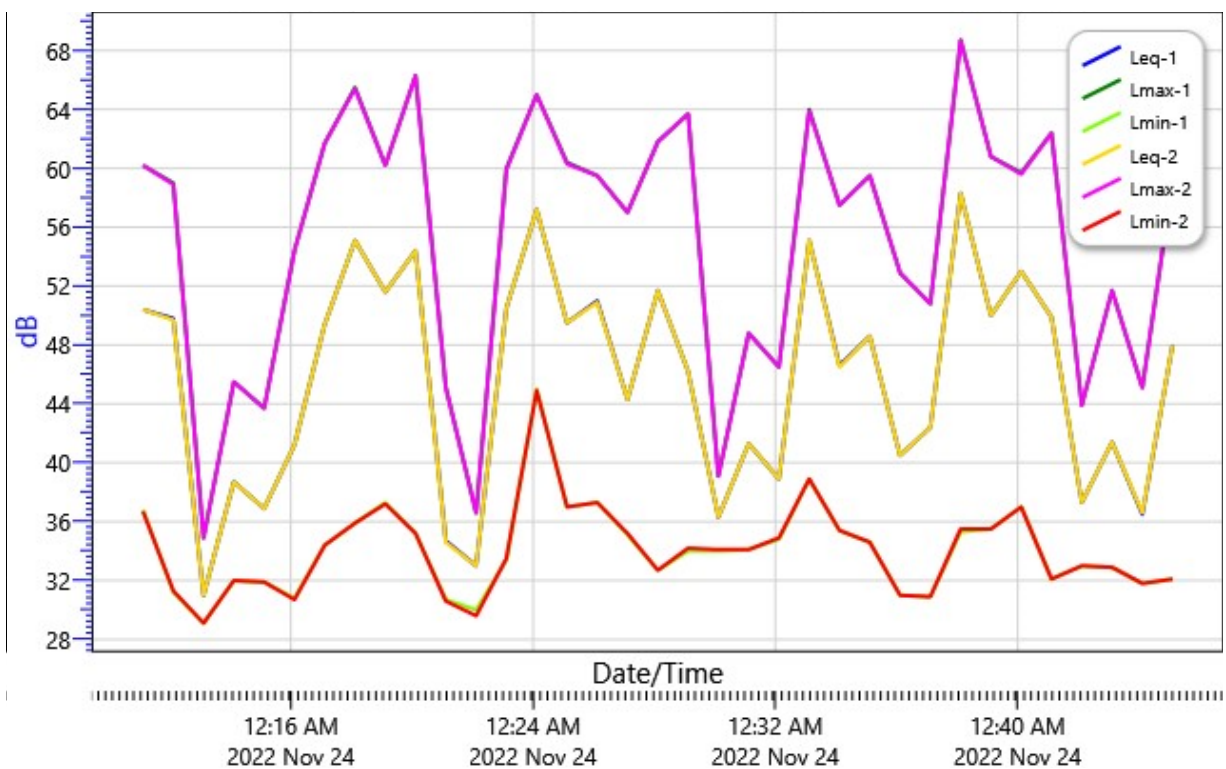
Filter Summary - Dose

Filter	Dose
--------	------

	79.3 %
16 Hz	0 %
31.5 Hz	0 %
63 Hz	0.7 %
125 Hz	0.4 %
250 Hz	0.7 %
500 Hz	21 %
1.00 kHz	42 %
2.00 kHz	12.8 %
4.00 kHz	0.6 %
8.00 kHz	0.4 %
16.00 kHz	0.3 %

Logged Data Chart

S013_BIU090026_28112022_104444: Logged Data Chart - Read Only



Appendix F

Glossary

GLOSSARY

1. A-weighted decibel - dBA or dB(A) - A-weighted decibel (dBA or dB(A)) is an expression of the relative loudness of sounds as perceived by the human ear. A-weighting gives more value to frequencies in the middle of the human hearing range and less value to frequencies at the upper and lower limits of human hearing. A-weighting is typically the standard for determining impacts and noise pollution. A-weighting is the most common, but other weighting systems exist. The most common are A, C and Z.
2. Sound Power - The sound power or acoustic power is the sound energy constantly transferred per second from the sound source. A sound source has a given constant sound power that does not change if it is placed in a different environment. Sound power is a theoretical value that is not measurable. It is calculated and expressed in watts and as sound power level LW in decibels. A sound source produces sound power and this generates a sound pressure fluctuation in the air. Sound power is the distance independent cause of this, whereas sound pressure is the distance-dependent effect.
3. Sound Pressure - Sound pressure is measure of the difference between the pressure caused by a specific sound wave and the ambient pressure at the same location. To measure sound pressure as it affects hearing, a logarithmic scale is used. The resulting sound pressure levels are expressed as decibels (dB). Sound pressure may also be referred to as sound pressure level.
4. Octave Frequency Bands - Octave frequency bands divide the audio spectrum into 10 equal parts. The middle frequencies of these bands are defined as 31.5 Hz, 63 Hz, 125 Hz, 250 Hz, 500 Hz, 1 kHz, 2 kHz, 4 kHz, 8 kHz and 16 kHz. Sound levels that have passed through an *octave band pass filter* are termed *octave band sound levels*.
5. Hertz (Hz) - hertz, unit of frequency. The number of hertz (abbreviated Hz) equals the number of cycles per second.
6. Automobiles (A) - All vehicles with two axles and four wheels designed primarily for transportation of nine or fewer passengers (automobiles), or transportation of cargo (light trucks). Generally the gross vehicle weight is less than 4,500 kilograms.
7. Noise Abatement Criteria - The noise levels established for various activities or land uses which represent the upper limit of acceptable traffic noise level conditions.
8. Design Year - The future year used to estimate the probable noise levels for the build out of the proposed facility, roadway, or other development.
9. Existing Noise Levels - The noise, made up of all the natural and man-made noises, considered to be usually present (unique noise events may be excluded) within a particular area's acoustical environment.
10. Heavy Trucks (HT) - All vehicles having three or more axles and designed for the transportation of cargo. Generally, the gross weight is greater than 12,000 kilograms.
11. L_{eq} - The equivalent steady state sound level which in a stated period of time would contain the same acoustic energy as the time-varying sound level during the same time period.
12. $L_{eq}(1)$ - The one-hour value of L_{eq} .

13. Medium Trucks (MT) - All vehicles having two axles and six wheels designed for the transportation of cargo. Generally, the gross vehicle weight is greater than 4,500 kilograms but less than 12,000 kilograms.
14. Noise Level - The sound level obtained through use of A-weighting characteristics specified by the American National Standards Institute (ANSI) Standard S1.4-1971. The unit of measure is the decibel (dB), commonly referred to as dBA when A-weighting is used.
15. Noise Standards - The criteria utilized to determine potential impacts or processes and procedures to determine potential impacts due to noise. The standards can include town, village, city, county, state and federal regulations.
16. Operating Speed - The highest overall speed at which a driver can travel on a given highway under favorable weather conditions and under prevailing traffic conditions, without at any time exceeding the safe speed as determined by the design speed on a section-by-section basis.
17. Noise Impacts - Impacts which occur when noise levels exceed noise abatement criteria, when the predicted noise levels substantially exceed the existing noise levels, or as defined by the noise standard applied to the project or undertaking.