REGIONE LAZIO

PROVINCIA DI ROMA

PROVINCIA DI LATINA

COMUNE DI NETTUNO

COMUNE DI LATINA

Proponente

NET1 POWER S.r.l.
Sede: Viale A. Volta, 101
50131 Firenze
P.IVA 07230420486

.....

Progettazione, Coordinamento e progettazione elettrica

STUDIO INGEGNERIA ELETTRICA
MEZZINA dott. ing. Antonio
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Tel. 0882.228072 | Fax 0882.243651
e-mail: info@studiomezzina.net

AENOR ER Empresa Registrada ER-0151/2008

CERTIFIED IQNet MANAGEMENT SYSTEM

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Studio di impatto ambientale

VDP S.r.l.
Via Federico Rosazza n. 38 - 00153 Rome - Italy
Tel. +39 065800506-065883135-0658343877
Fax +39 065896686
mail: vdp@vdpsrl.it

.....

Studio archeologico

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E-Mail: amangia@yahoo.it
Elenco Nazionale dei Professionisti dei Beni Culturali del Ministero della Cultura n.1516

.....

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Studio acustico

STUDIO FALCONE Ingegneria

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E-Mail: antonio.falcone@studiofalcone.eu
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Studio strutturale

STM TECHNICAL SOLUTIONS

Ing. Tommaso Monaco
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Consulenza topografica

Geom. Matteo Occhiochiuso
Tel. 328 5615292
E-Mail: matteo.occhiochiuso@virgilio.it
Collegio dei Circondariale Geometri e Geometri Laureati di Lucera matr. n. 1101

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Opera

Progetto definitivo per la realizzazione di un impianto Fotovoltaico denominato“NETTUNO” da realizzarsi su aree demaniali militari in località "Eschieto" nel territorio comunale di Nettuno (RM) per una potenza complessiva di 40,322 MWp nonchè delle opere connesse ed infrastrutture indispensabili alla costruzione e all'esercizio dell'impianto

Oggetto

Folder:

Nome Elaborato: STUDIO DI IMPATTO AMBIENTALE - SCHEDE MISURE FONOMETRICHE

Descrizione Elaborato:

00	Luglio 2023	Progetto definitivo		Ing. A. Mezzina	NET1 POWER S.r.l.
Rev.	Data	Oggetto della revisione	Elaborazione	Verifica	Approvazione
Scala:					
Formato:					

RAPPORTO DI MISURA RILIEVI ACUSTICI – INDAGINI SPOT

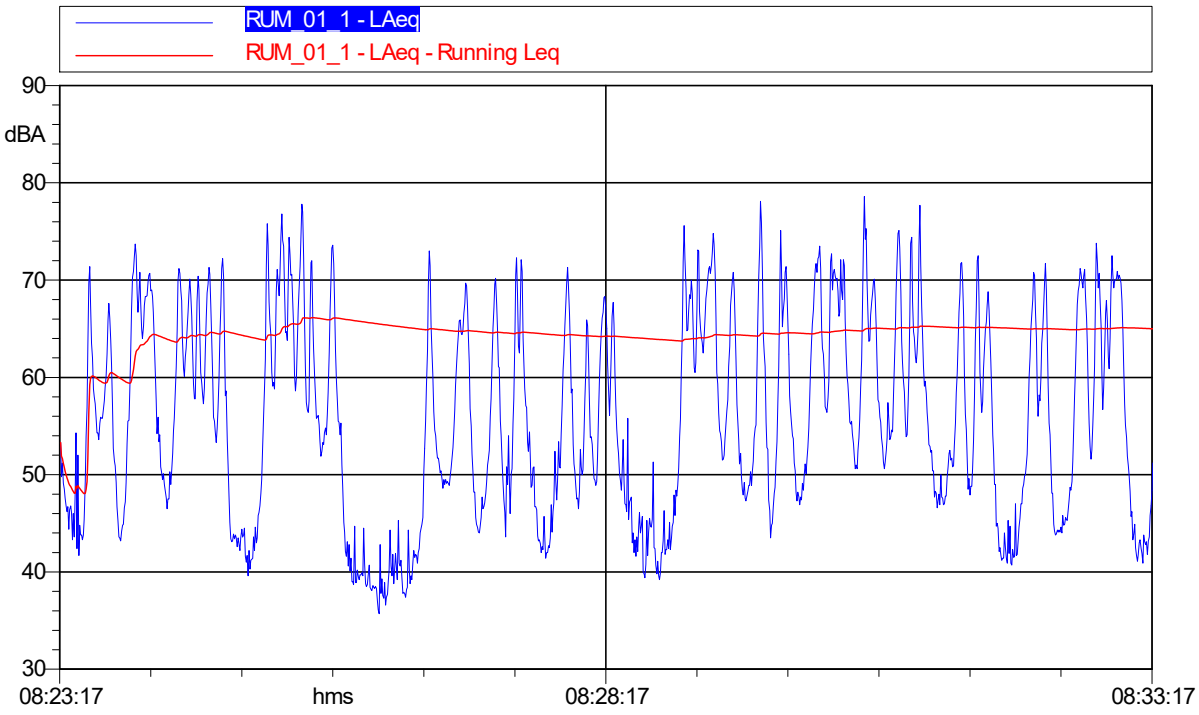
CARATTERISTICHE PUNTO DI MISURA			
Punto di misura	**RUM_01**	Coordinate	**Latitudine 41°27'31.10"N** **Longitudine 12°41'19.23"E**
Regione	**Lazio**	Provincia	**Roma**
Comune	**Nettuno**	Località	**Nettuno**
Indirizzo	**Via Tirso / Via Acciarella**	Operatore	**S.de Fabritiis (Enteca n.7297)**
Data	**30/05/2023**	Strumentazione	**L&D LxT**
Sorgente preval.	**Traffico stradale, cicale**	Altezza Mic.	**1,5 m**

RISULTATI INDAGINE FONOMETRICA

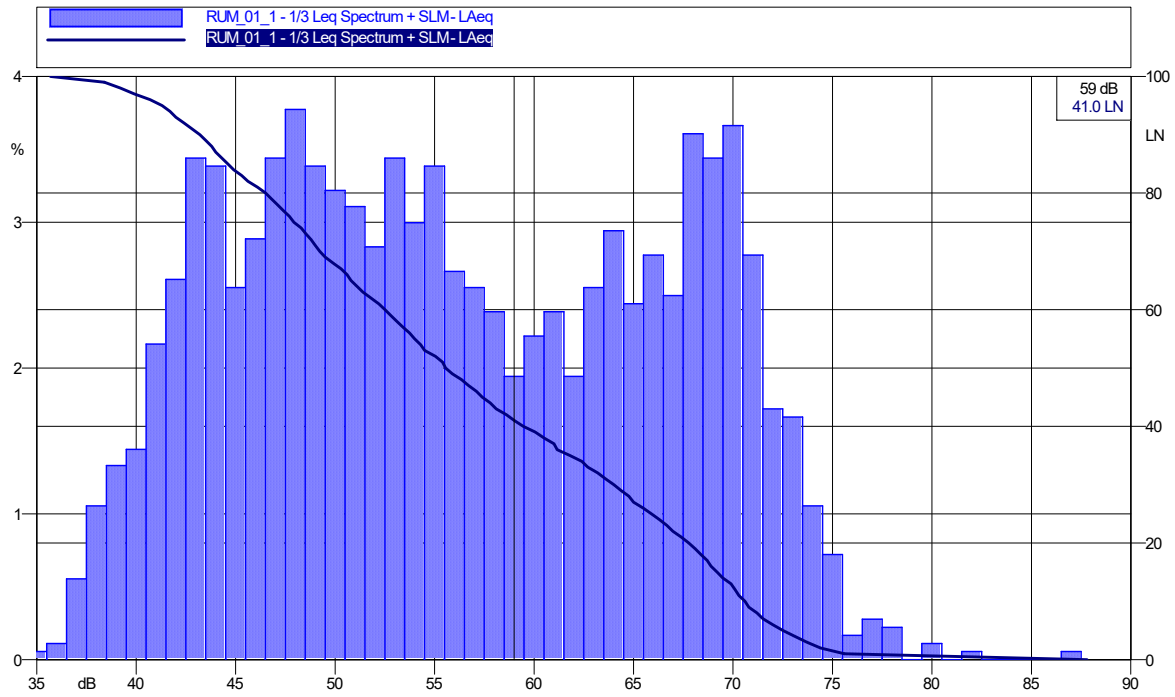
Intervallo	Data	Ora	Leq [dBA]	L max [dBA]	L min [dBA]	L1	L5	L10	L50	L90	L99
1°-Diurno	30/05/2023	08:23:17	66,2	87,8	35,7	75,6	72,5	70,6	55,5	43,2	38,4
2°-Diurno	30/05/2023	17:22:54	67,5	79,8	37,3	76,9	74,2	72,4	59,2	45,8	40,1
Media dei valori diurni			**66,9**	**85,4**	**36,6**	**76,3**	**73,4**	**71,6**	**57,7**	**44,7**	**39,3**

NOTE

OUTPUT GRAFICO DI MISURA – TIME HISTORY SPOT E CURVA DISTRIBUTIVA / CUMULATIVA – VALORI IN DB(A)

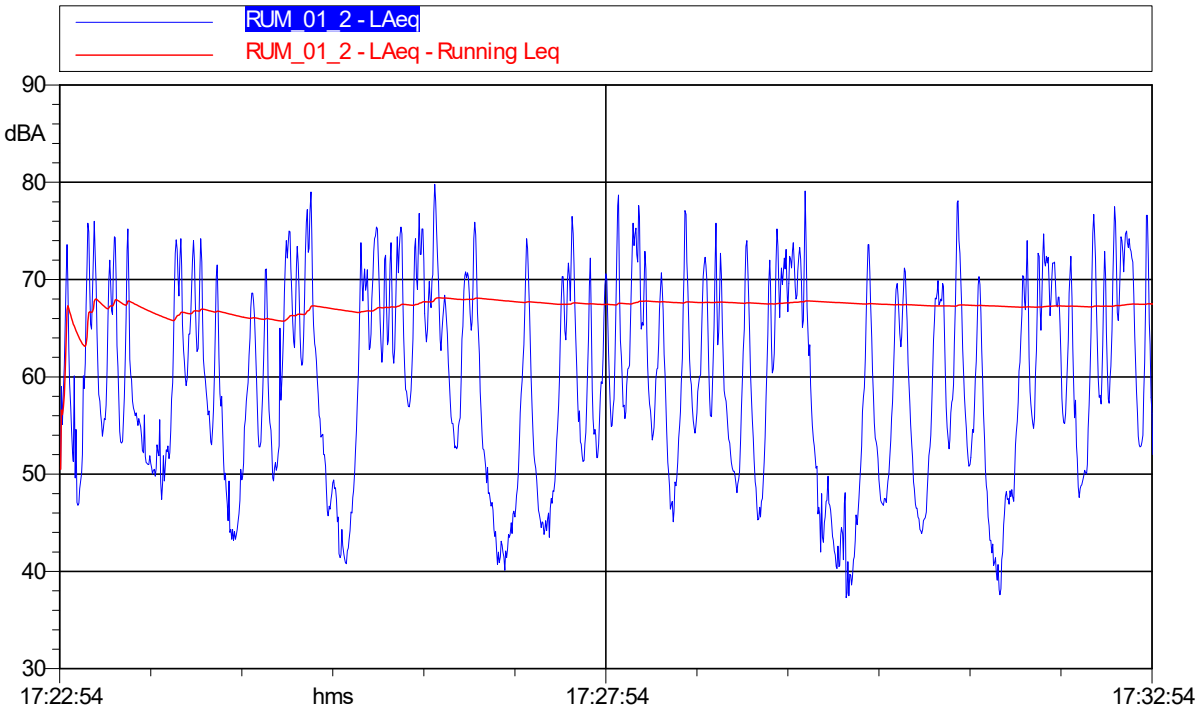


Rum 1 Time History spot _1

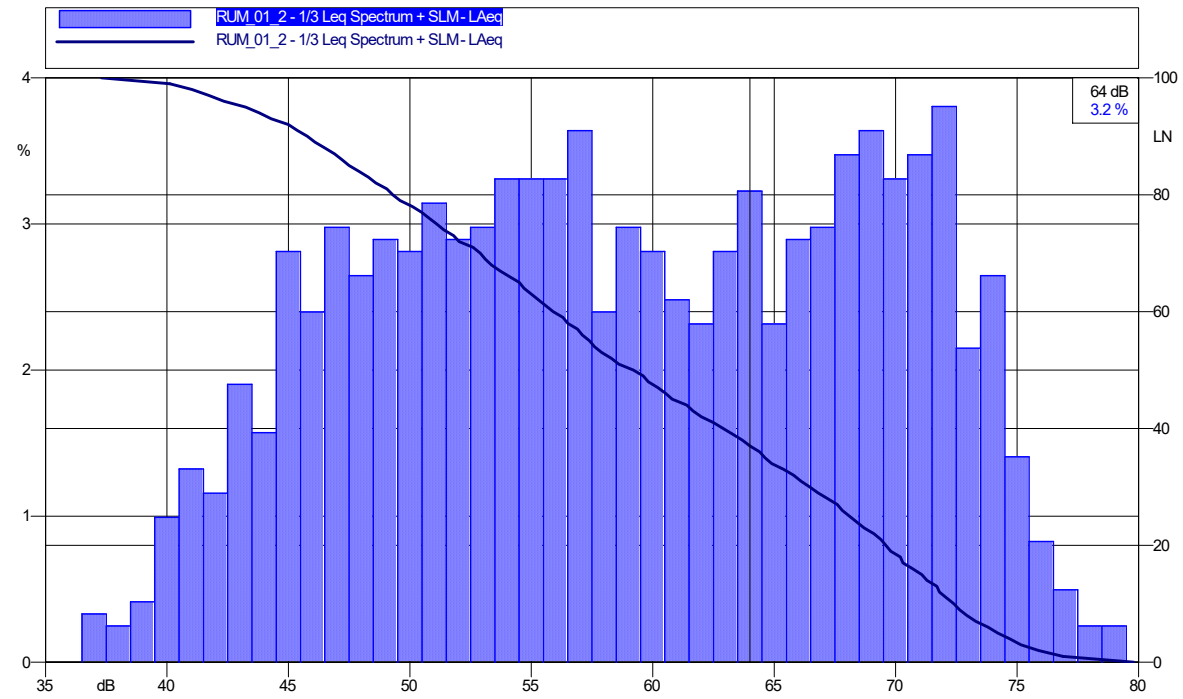


Punto A Curva cumulativa/distributiva

OUTPUT GRAFICO DI MISURA – TIME HISTORY SPOT E CURVA DISTRIBUTIVA / CUMULATIVA – VALORI IN DB(A)



Rum 1 Time History spot_2



Curva cumulativa/distributiva

RAPPORTO DI MISURA RILIEVI ACUSTICI – INDAGINI SPOT

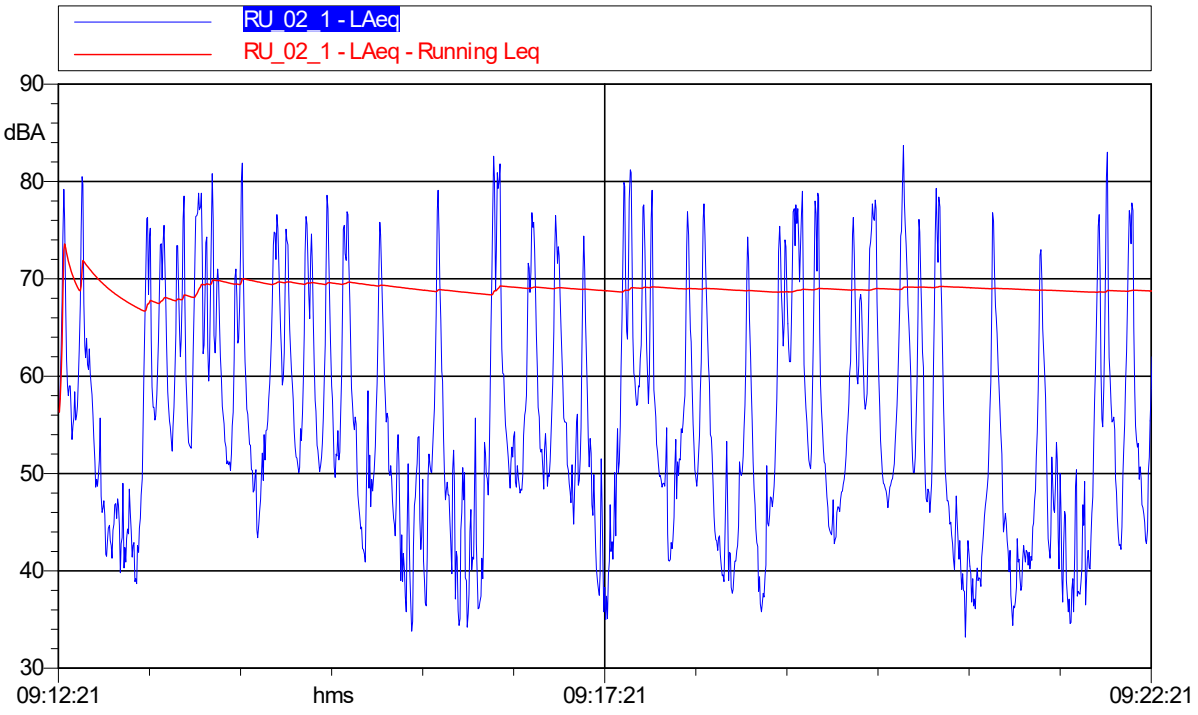
CARATTERISTICHE PUNTO DI MISURA			
Punto di misura	**RUM_02**	Coordinate	**Latitudine 41°27'38.96"N** **Longitudine 12°41'53.14"E**
Regione	**Lazio**	Provincia	**Roma**
Comune	**Nettuno**	Località	**Nettuno**
Indirizzo	**Via Acciarella 123**	Operatore	**S.de Fabritiis (Enteca n.7297)**
Data	**30/05/2023**	Strumentazione	**L&D LxT**
Sorgente preval.	**Traffico stradale, avifauna, cicale**	Altezza Mic.	**1,5 m**

RISULTATI INDAGINE FONOMETRICA

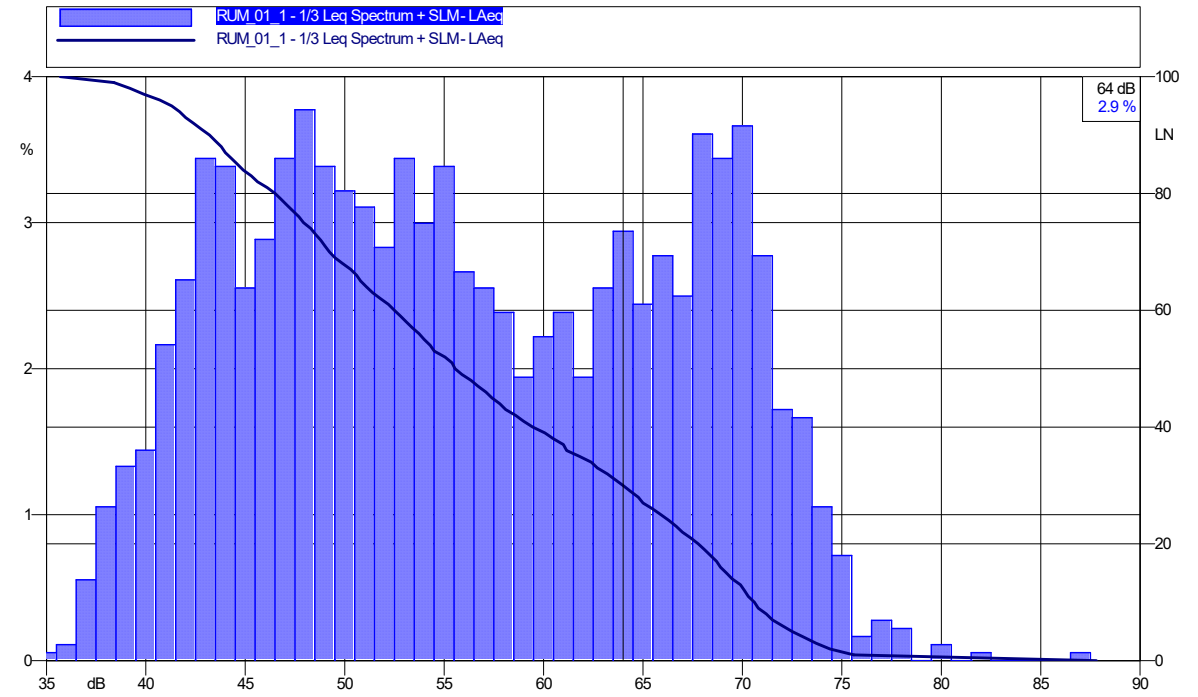
Intervallo	Data	Ora	Leq [dBA]	L max [dBA]	L min [dBA]	L1	L5	L10	L50	L90	L99
1°-Diurno	30/05/2023	09:12:21	68,7	83,7	33,2	80	76,6	73,7	53,3	40,9	35,8
2°-Diurno	30/05/2023	15:31:22	69,5	86,7	34,1	80,9	77,3	74,1	55,3	40,8	35,5
Media dei valori diurni			**69,1**	**85,5**	**33,7**	**80,5**	**77,0**	**73,9**	**54,4**	**40,9**	**35,7**

NOTE

OUTPUT GRAFICO DI MISURA – TIME HISTORY SPOT E CURVA DISTRIBUTIVA / CUMULATIVA – VALORI IN DB(A)

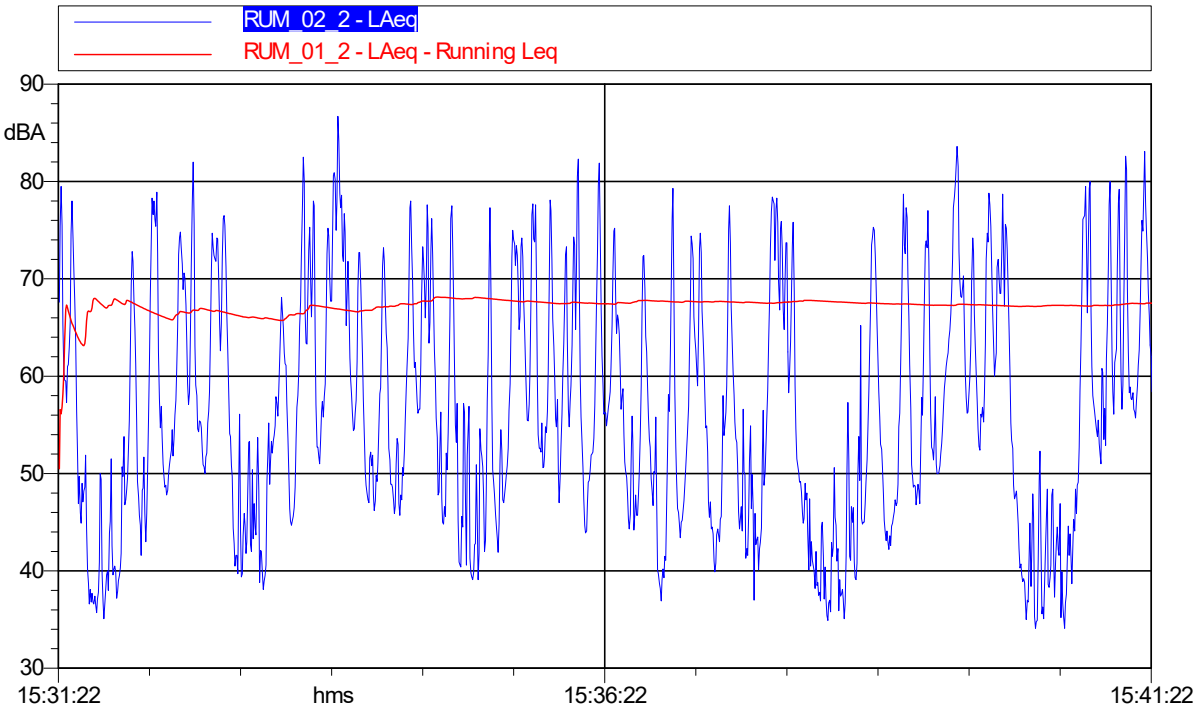


Rum 2 Time History spot_1

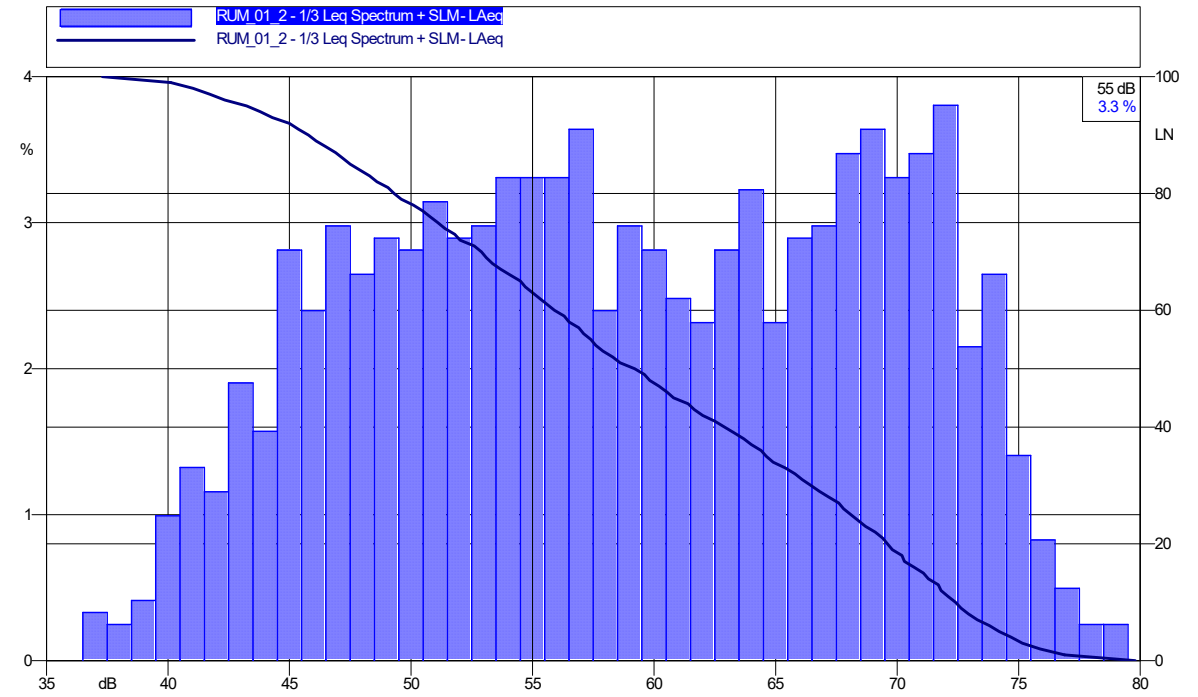


Curva cumulativa/distributiva

OUTPUT GRAFICO DI MISURA – TIME HISTORY SPOT E CURVA DISTRIBUTIVA / CUMULATIVA – VALORI IN DB(A)



Punto 2 Time History spot_2



Curva cumulativa/distributiva

RAPPORTO DI MISURA RILIEVI ACUSTICI – INDAGINI SPOT

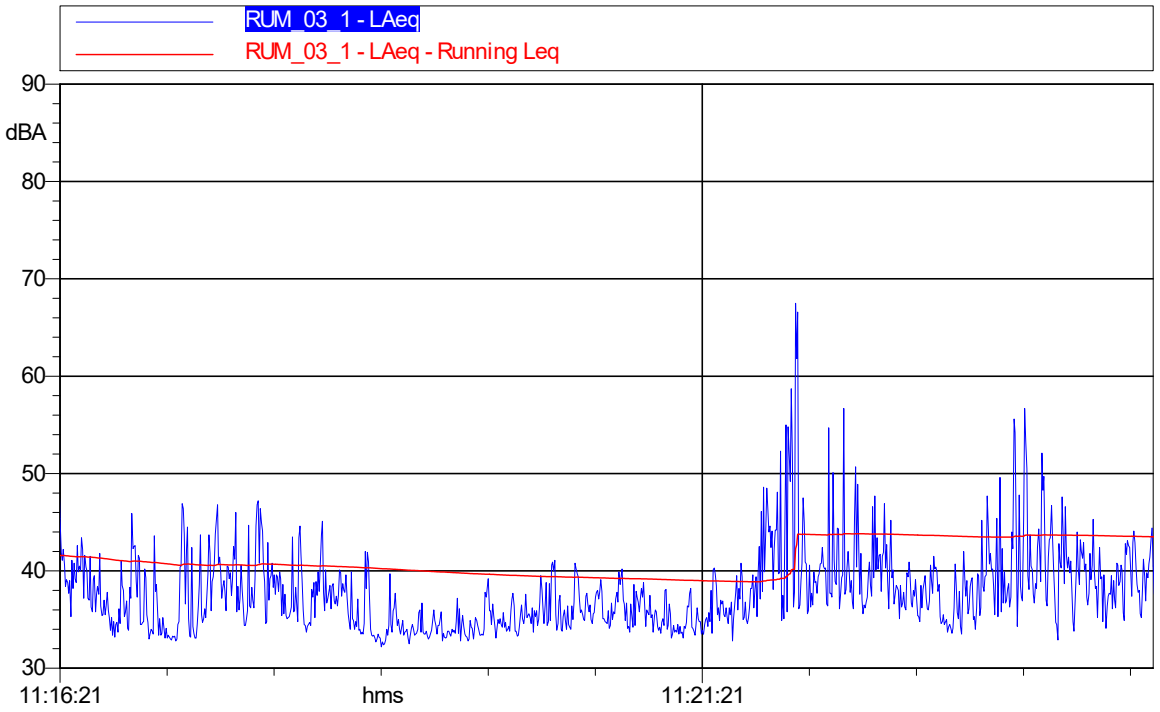
CARATTERISTICHE PUNTO DI MISURA			
Punto di misura	**RUM_03**	Coordinate	**Latitudine 41°27'11.54"N** **Longitudine 12°41'35.95"E**
Regione	**Lazio**	Provincia	**Roma**
Comune	**Nettuno**	Località	**Interno area militare Nettuno**
Indirizzo	**Via Acciarella**	Operatore	**S.de Fabritiis (Enteca n.7297)**
Data	**30/05/2023**	Strumentazione	**L&D LxT**
Sorgente preval.	**Traffico stradale, attività militari, avifauna, cicale**	Altezza Mic.	**1,5 m**

RISULTATI INDAGINE FONOMETRICA

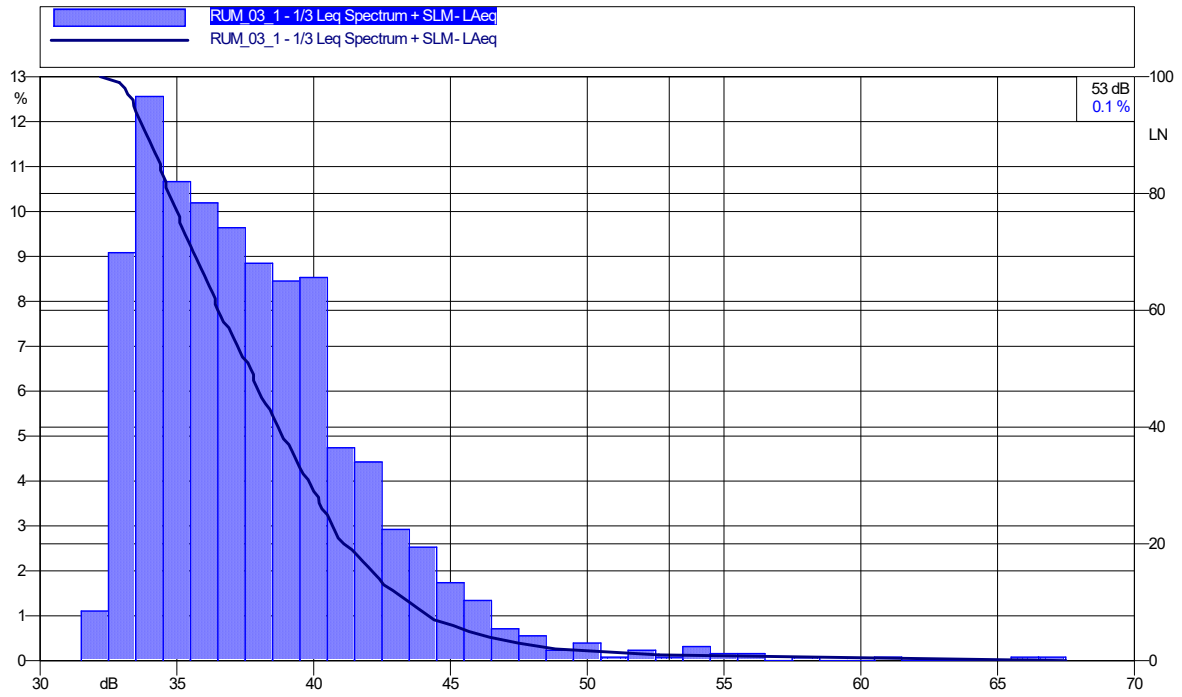
Intervallo	Data	Ora	Leq [dBA]	L max [dBA]	L min [dBA]	L1	L5	L10	L50	L90	L99
1°-Diurno	30/05/2023	11:14:52	45,3	67,5	32,2	52,6	45,7	43,5	37,7	33,9	32,9
2°-Diurno	30/05/2023	14:48:58	47,8	70,9	33,4	59,4	50,5	43,7	36,3	34,4	33,7
Media dei valori diurni			**46,7**	**69,5**	**32,8**	**57,2**	**48,7**	**43,6**	**37,1**	**34,2**	**33,3**

NOTE

OUTPUT GRAFICO DI MISURA – TIME HISTORY SPOT E CURVA DISTRIBUTIVA / CUMULATIVA – VALORI IN DB(A)

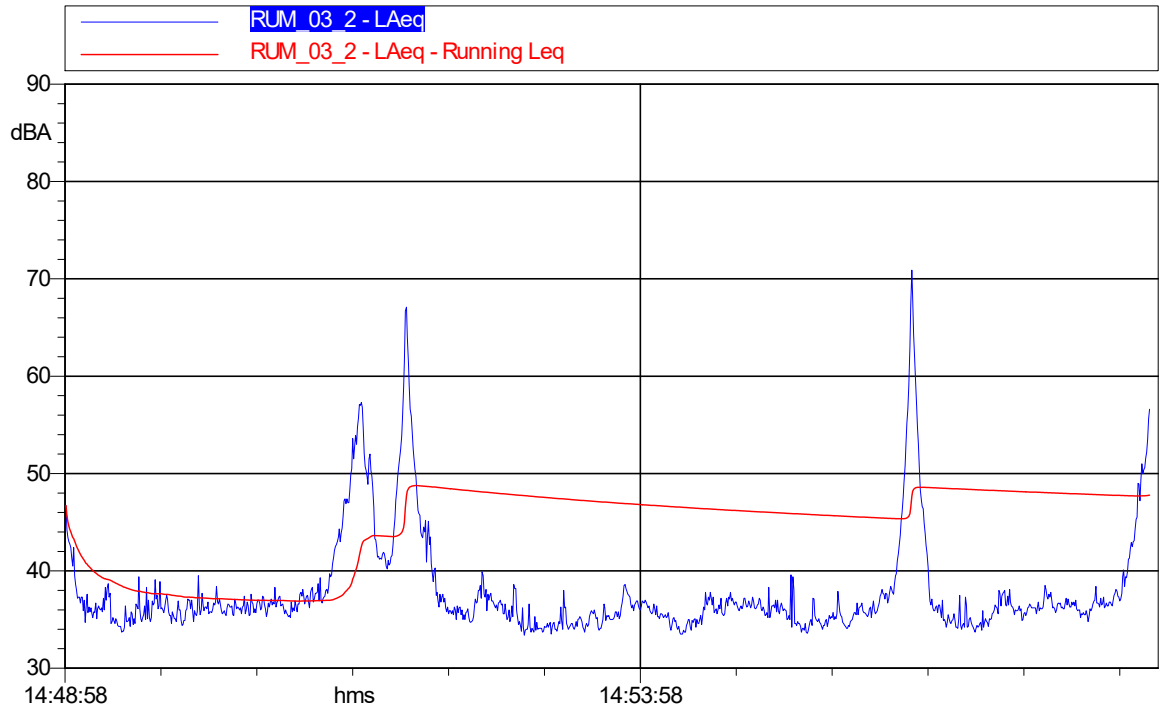


Rum 3 Time History spot_1

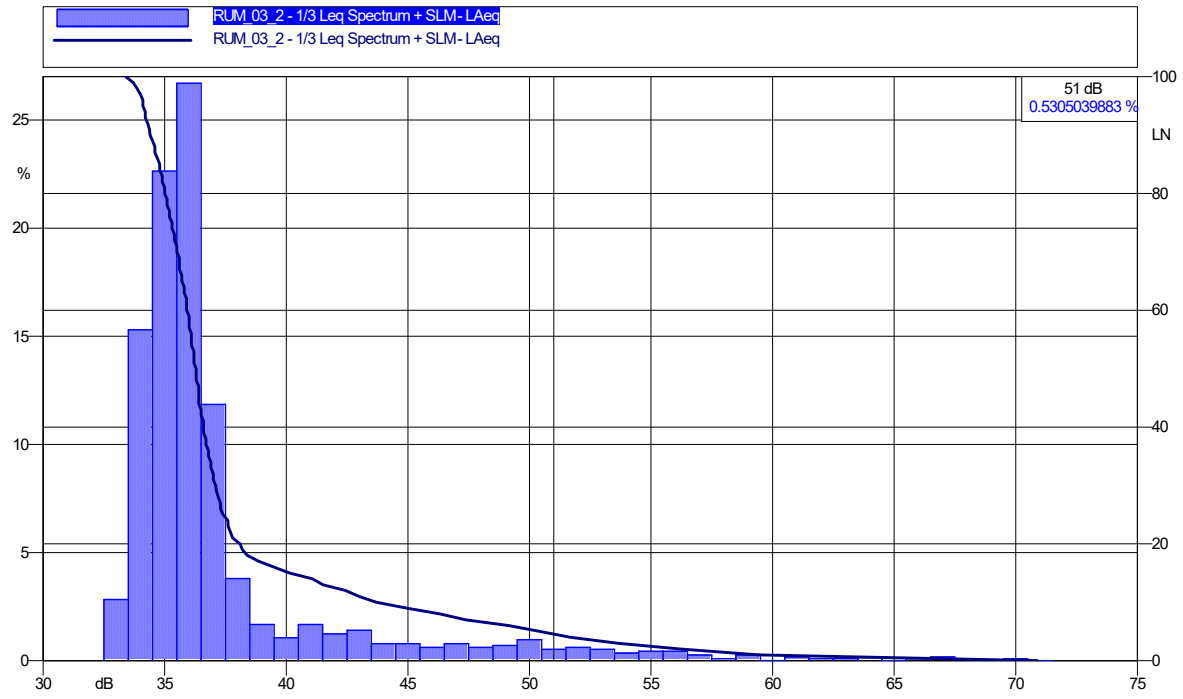


Curva cumulativa/distributiva

OUTPUT GRAFICO DI MISURA – TIME HISTORY SPOT E CURVA DISTRIBUTIVA / CUMULATIVA – VALORI IN DB(A)



Rum 3 Time History spot_2



Curva cumulativa/distributiva

RAPPORTO DI MISURA RILIEVI ACUSTICI – INDAGINI SPOT

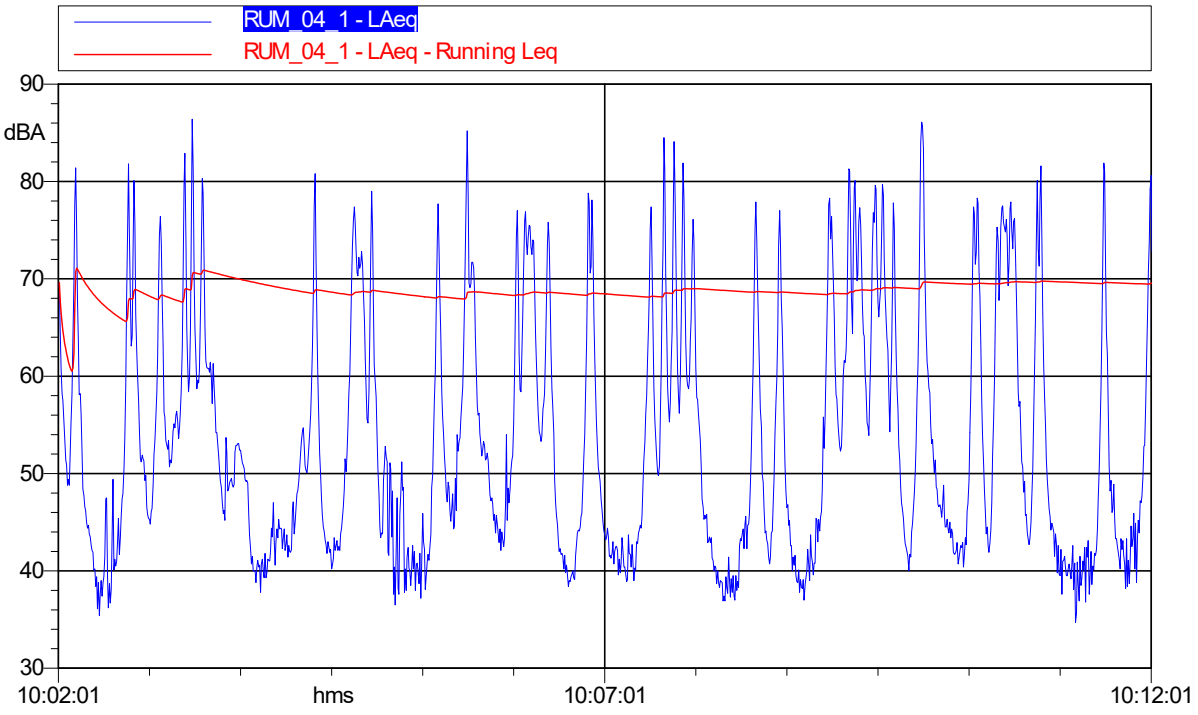
CARATTERISTICHE PUNTO DI MISURA			
Punto di misura	**RUM_04**	Coordinate	**Latitudine 41°27'4.80"N** **Longitudine 12°43'48.59"E**
Regione	**Lazio**	Provincia	**Roma**
Comune	**Cerveteri**	Località	**Nettuno**
Indirizzo	**Via Val di Chiana/Via Acciarella**	Operatore	**S.de Fabritiis (Enteca n.7297)**
Data	**30/05/2023**	Strumentazione	**L&D LxT**
Sorgente preval.	**Traffico stradale, avifauna, cicale**	Altezza Mic.	**1,5 m**

RISULTATI INDAGINE FONOMETRICA

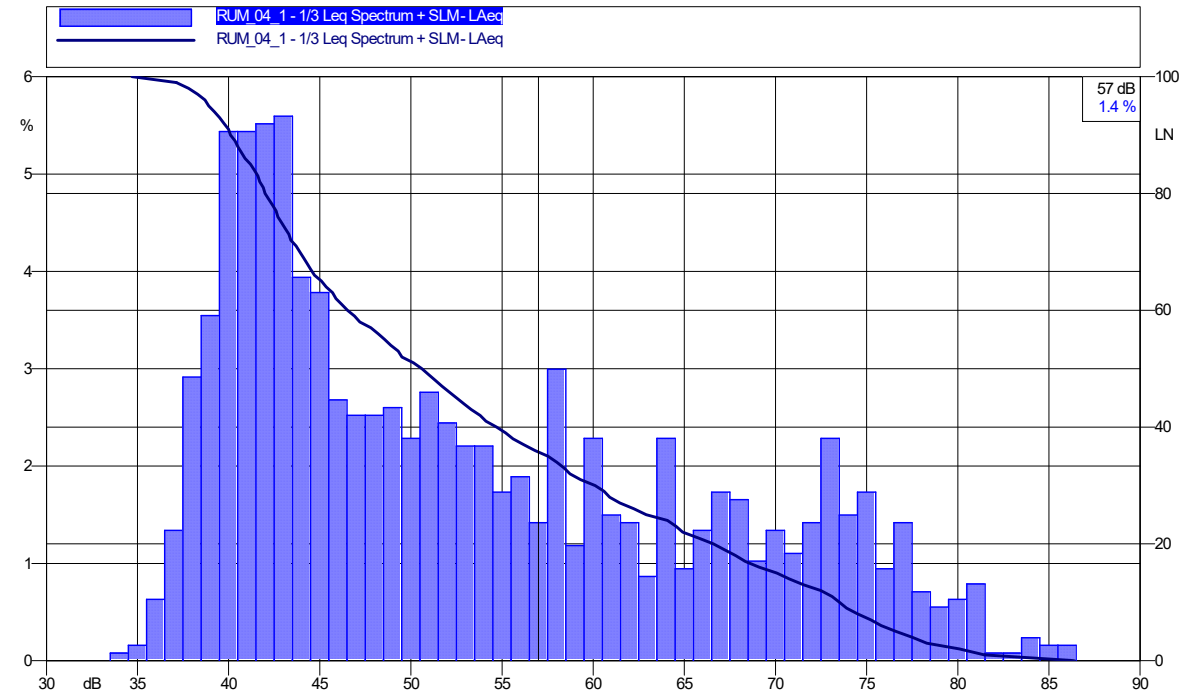
Intervallo	Data	Ora	Leq [dBA]	L max [dBA]	L min [dBA]	L1	L5	L10	L50	L90	L99
1°-Diurno	30/05/2023	10:02:01	69,5	86,4	34,7	81,5	76,6	73,5	50,6	40,1	37,1
2°-Diurno	30/05/2023	15:57:33	70,1	87,3	33,1	82,6	77,8	74,3	50,4	39,1	35,5
Media dei valori diurni			**69,8**	**86,9**	**34,0**	**82,1**	**77,2**	**73,9**	**50,5**	**39,6**	**36,4**

NOTE

OUTPUT GRAFICO DI MISURA – TIME HISTORY SPOT E CURVA DISTRIBUTIVA / CUMULATIVA – VALORI IN DB(A)

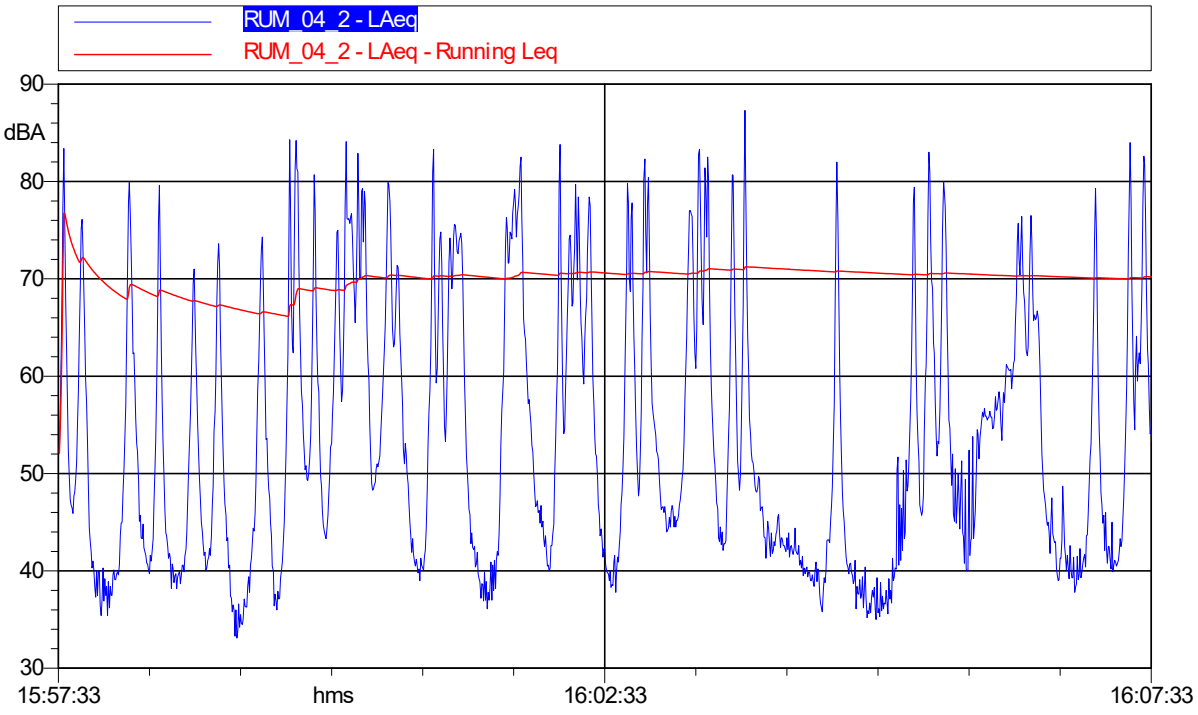


Rum 4 Time History spot_1

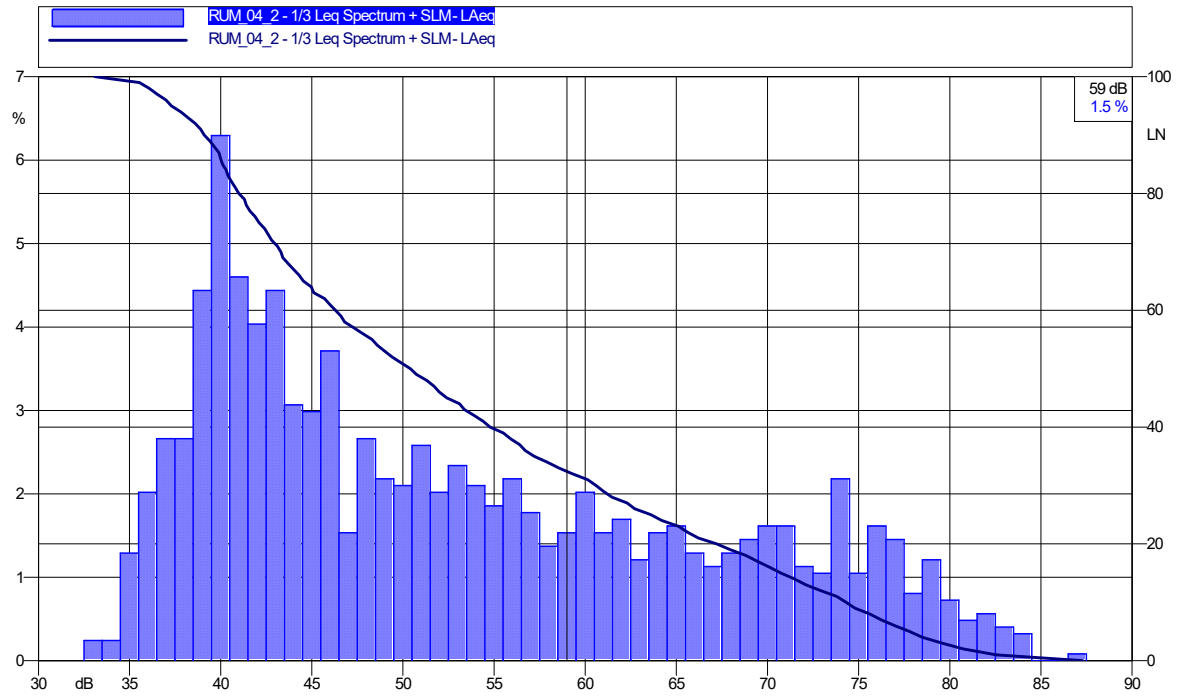


Curva cumulativa/distributiva

OUTPUT GRAFICO DI MISURA – TIME HISTORY SPOT E CURVA DISTRIBUTIVA / CUMULATIVA – VALORI IN DB(A)



Rum 4 Time History spot_2



Curva cumulativa/distributiva

RAPPORTO DI MISURA RILIEVI ACUSTICI – INDAGINI SPOT

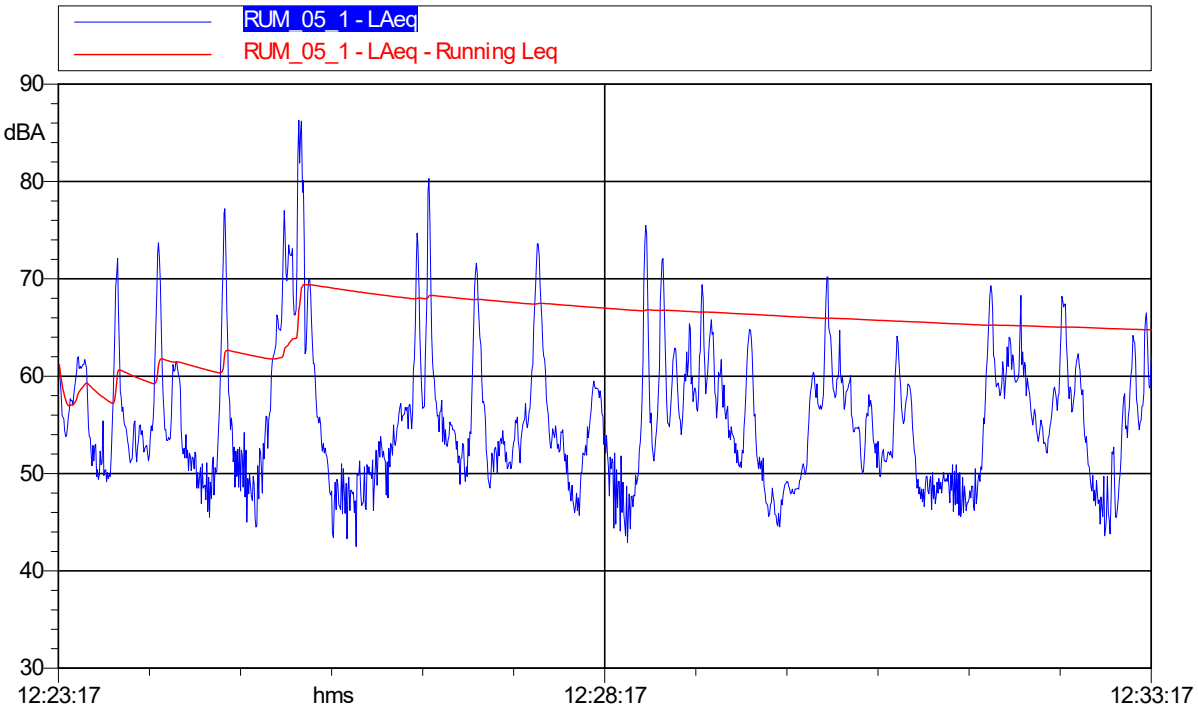
CARATTERISTICHE PUNTO DI MISURA			
Punto di misura	**Rum_5**	Coordinate	**Latitudine 41°26'1.04"N** **Longitudine 12°47'15.13"E**
Regione	**Lazio**	Provincia	**Latina**
Comune	**Latina**	Località	**Astura**
Indirizzo	**Strada Astura /strada alta**	Operatore	**S.de Fabritiis (Enteca n.7297)**
Data	**30/05/2023**	Strumentazione	**L&D LxT**
Sorgente preval.	**Traffico stradale, avifauna, cicale**	Altezza Mic.	**1,5 m**

RISULTATI INDAGINE FONOMETRICA

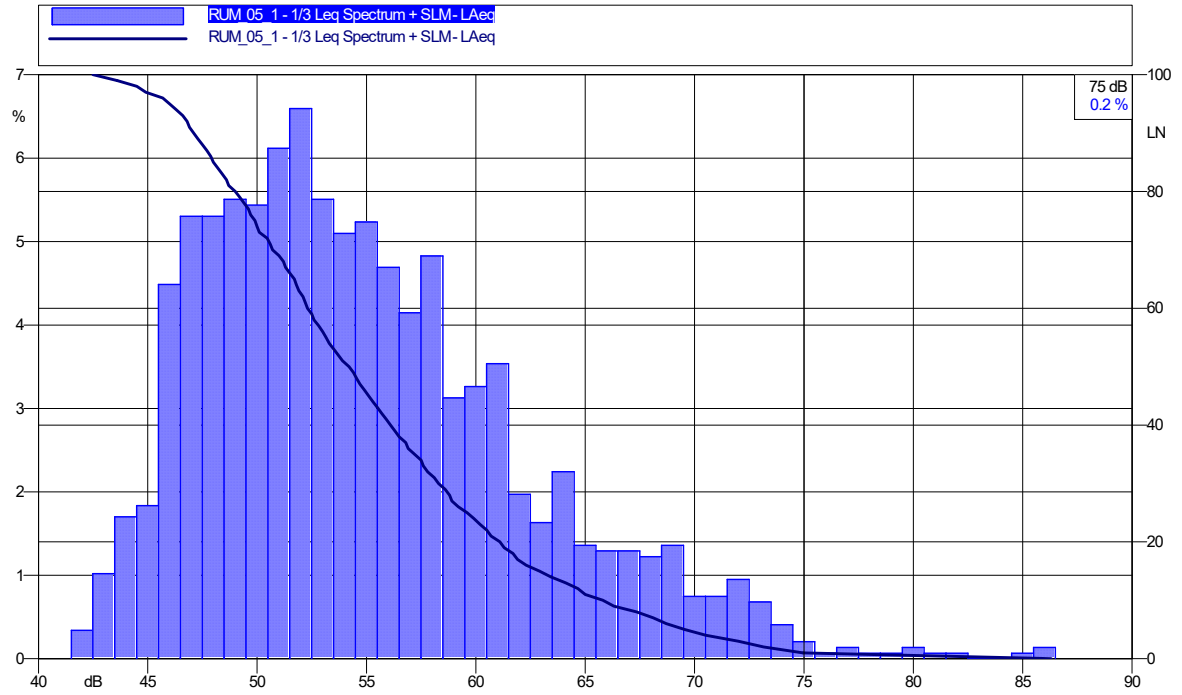
Intervallo	Data	Ora	Leq [dBA]	L max [dBA]	L min [dBA]	L1	L5	L10	L50	L90	L99
1°-Diurno	30/05/2023	12:23:17	64,6	86,3	42,5	75,0	69,5	65,8	54,2	47,1	43,6
2°-Diurno	30/05/2023	18:13:02	60,0	75,8	41,0	69,9	66,8	63,8	54,6	48,7	42,8
Media dei valori diurni			**62,9**	**83,7**	**41,8**	**73,2**	**68,4**	**64,9**	**54,4**	**48,0**	**43,2**

NOTE

OUTPUT GRAFICO DI MISURA – TIME HISTORY SPOT E CURVA DISTRIBUTIVA / CUMULATIVA – VALORI IN DB(A)

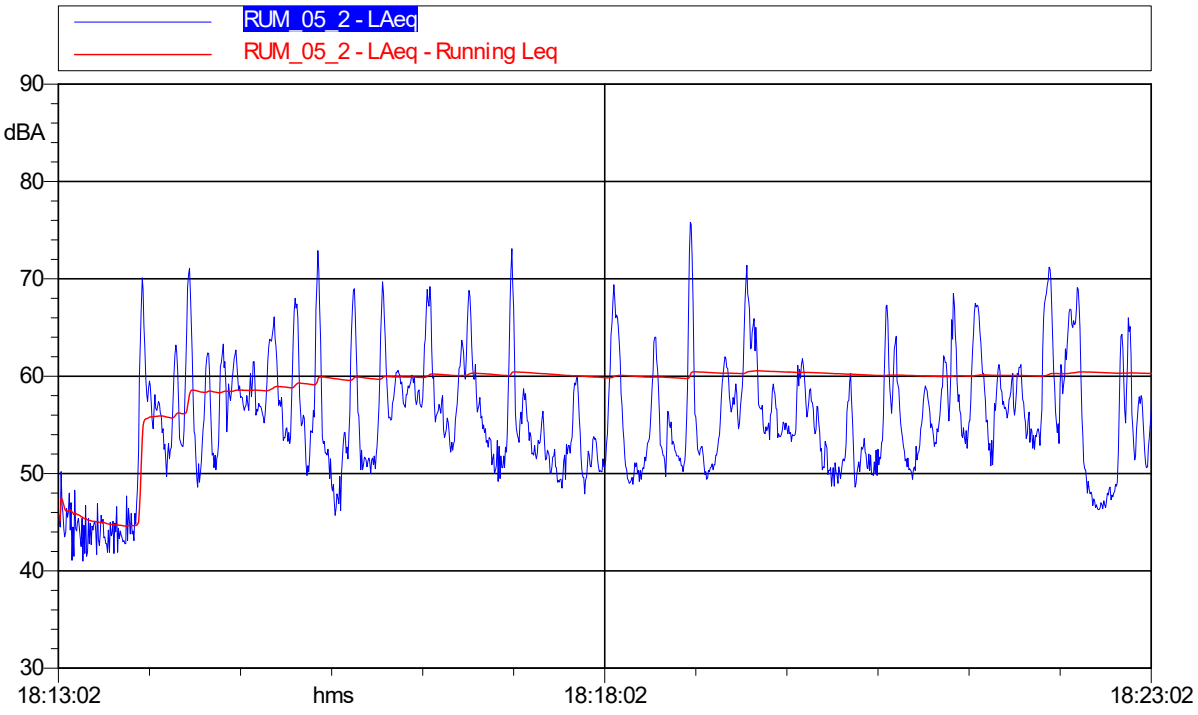


Punto 5 Time History spot_1

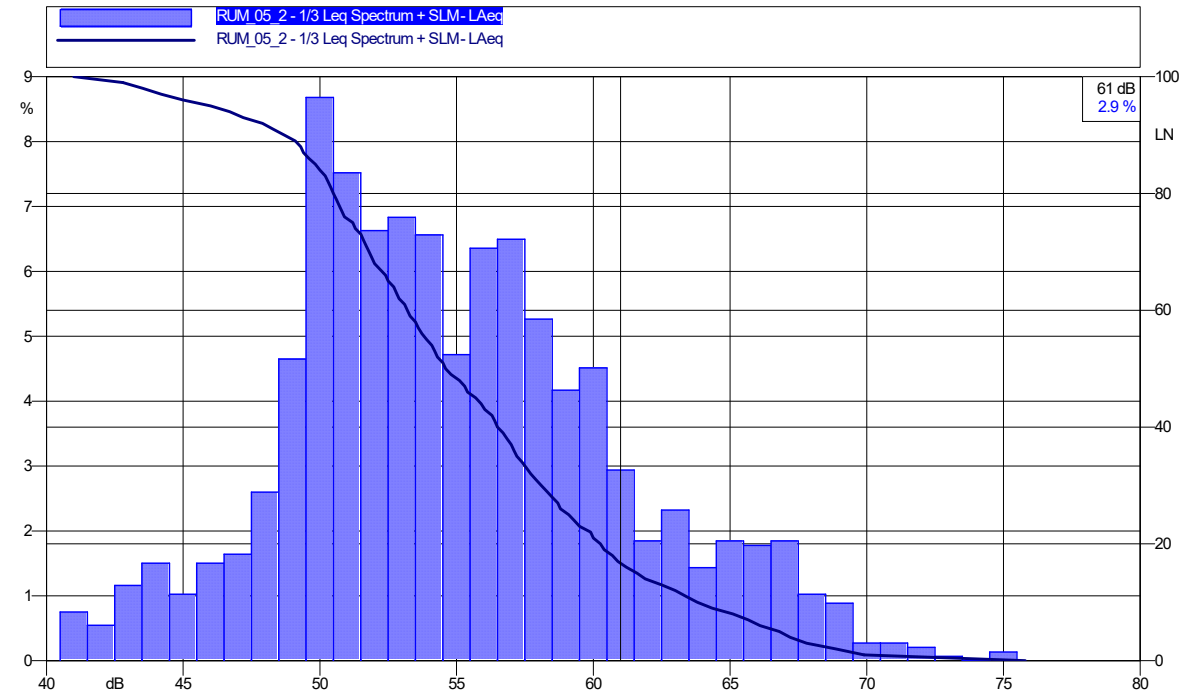


Curva cumulativa/distributiva

OUTPUT GRAFICO DI MISURA – TIME HISTORY SPOT E CURVA DISTRIBUTIVA / CUMULATIVA – VALORI IN DB(A)



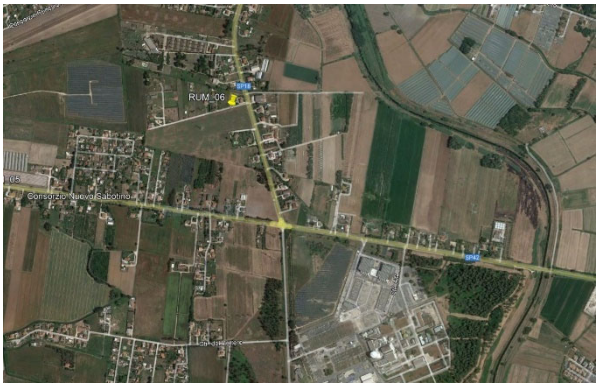
Punto 5 Time History spot_2



Curva cumulativa/distributiva

RAPPORTO DI MISURA RILIEVI ACUSTICI – INDAGINI SPOT

CARATTERISTICHE PUNTO DI MISURA			
Punto di misura	**RUM_06**	Coordinate	**Latitudine 41°26'10.79"N** **Longitudine 12°48'0.12"E**
Regione	**Lazio**	Provincia	**Latina**
Comune	**Latina**	Località	**Strada Macchia Grande**
Indirizzo	**Strada Macchia Grande 7 bis**	Operatore	**S.de Fabritiis (Enteca n.7297)**
Data	**30/05/2023**	Strumentazione	**L&D LxT**
Sorgente preval.	**Traffico stradale, avifauna, cicale**	Altezza Mic.	**1,5 m**

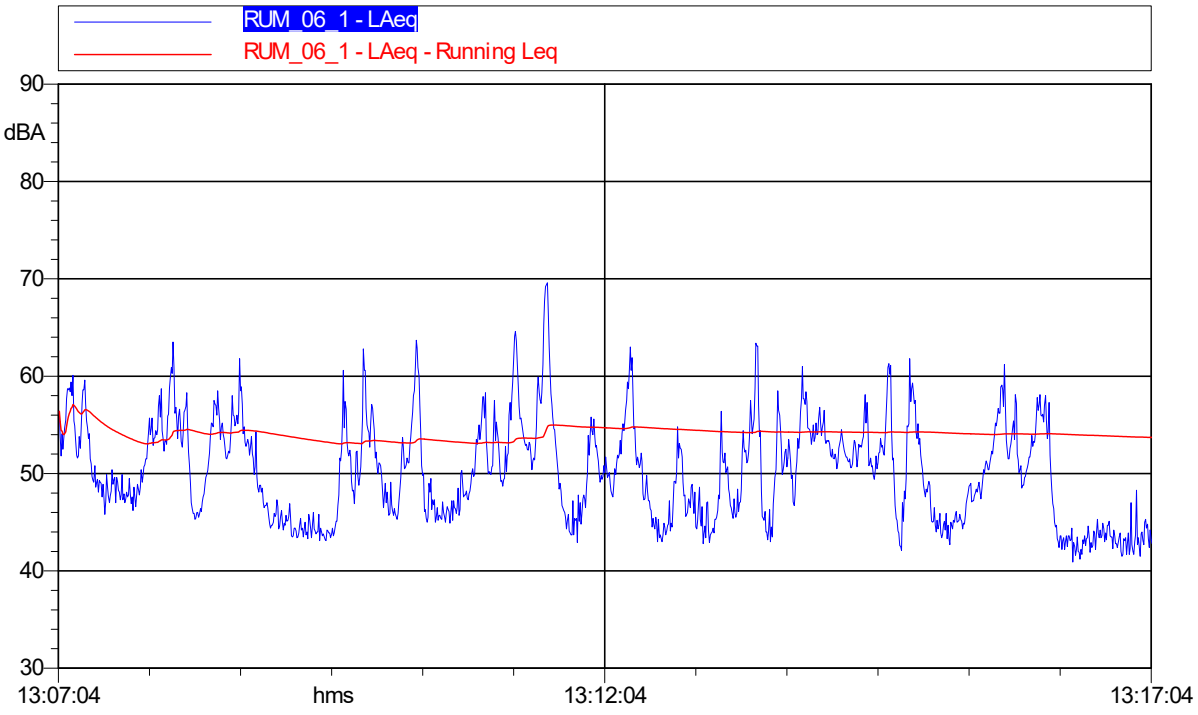


RISULTATI INDAGINE FONOMETRICA

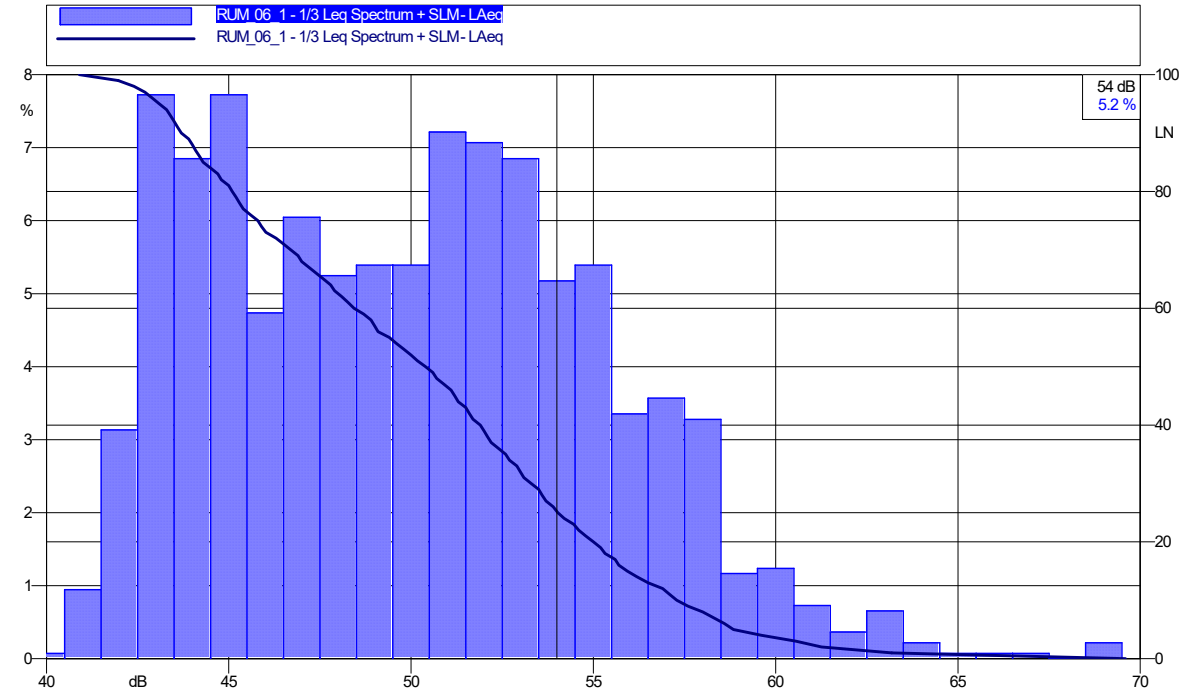
Intervallo	Data	Ora	Leq [dBA]	L max [dBA]	L min [dBA]	L1	L5	L10	L50	L90	L99
1°-Diurno	30/05/2023	13:07:04	53,9	69,6	40,9	63,2	58,8	57,3	50,4	43,7	42,0
2°-Diurno	30/05/2023	18:36:28	55,1	72,8	42,0	65,6	59,8	57,8	51,1	46,3	43,9
Media dei valori diurni			**54,5**	**71,5**	**41,5**	**64,6**	**59,3**	**57,6**	**50,8**	**45,2**	**43,1**

NOTE

OUTPUT GRAFICO DI MISURA – TIME HISTORY SPOT E CURVA DISTRIBUTIVA / CUMULATIVA – VALORI IN DB(A)

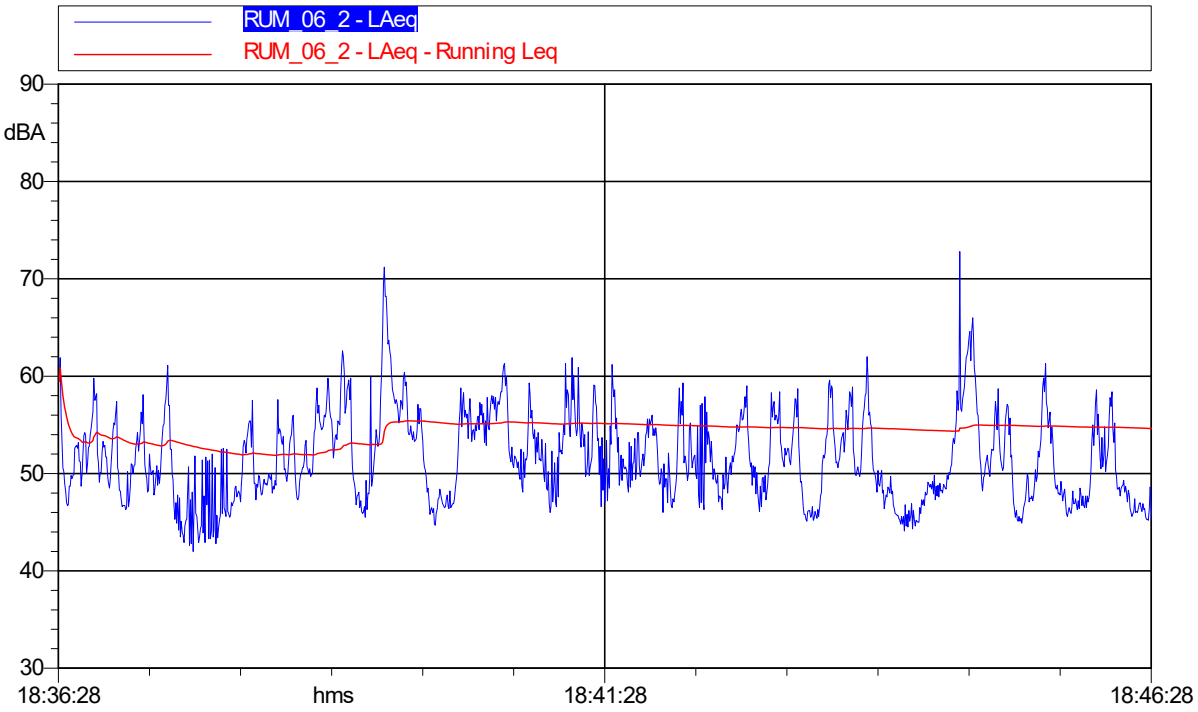


Punto 6 Time History spot_1

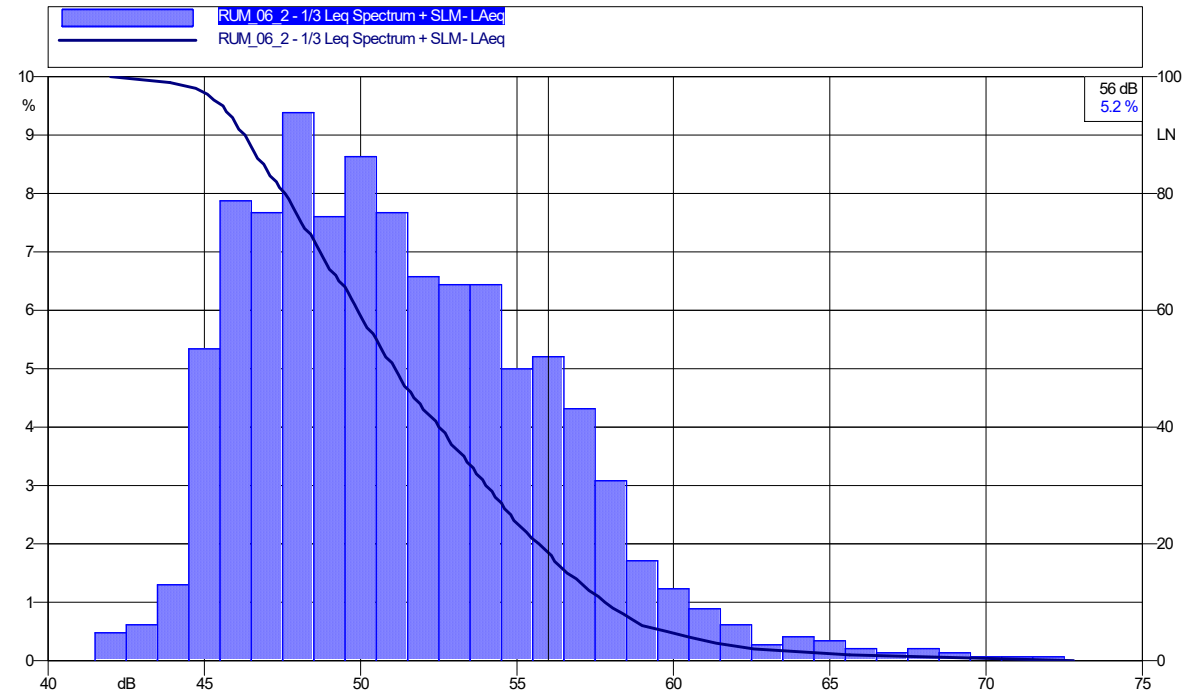


Curva cumulativa/distributiva

OUTPUT GRAFICO DI MISURA – TIME HISTORY SPOT E CURVA DISTRIBUTIVA / CUMULATIVA – VALORI IN DB(A)



Punto 6 Time History spot_2



Curva cumulativa/distributiva

CERTIFICATO DI TARATURA DELLA STRUMENTAZIONE

Calibration Certificate

Certificate Number 2022015834
Customer:
Spectra
Via J.F. Kennedy, 19
Vimercate, MB 20871, Italy

Model Number	LxT1	***Procedure Number***	D0001.8384
Serial Number	0007232	***Technician***	Jacob Cannon
Test Results	**Pass**	***Calibration Date***	14 Dec 2022
Initial Condition	As Manufactured	***Calibration Due***	
Description	SoundTrack LxT Class 1 Class 1 Sound Level Meter Firmware Revision: 2.404	***Temperature***	23.49 °C ± 0.25 °C
		Humidity	50.6 %RH ± 2.0 %RH
		Static Pressure	86.35 kPa ± 0.13 kPa

Evaluation Method ***Tested with:*** ***Data reported in dB re 20 µPa.***

Larson Davis PRMLxT1L. S/N 077681
Larson Davis CAL200. S/N 9079
Larson Davis CAL291. S/N 0108
PCB 377B02. S/N 342971

Compliance Standards Compliant to Manufacturer Specifications and the following standards when combined with Calibration Certificate from procedure D0001.8378:

IEC 60651:2001 Type 1	ANSI S1.4-2014 Class 1
IEC 60804:2000 Type 1	ANSI S1.4 (R2006) Type 1
IEC 61252:2002	ANSI S1.11 (R2009) Class 1
IEC 61260:2001 Class 1	ANSI S1.25 (R2007)
IEC 61672:2013 Class 1	ANSI S1.43 (R2007) Type 1

Issuing lab certifies that the instrument described above meets or exceeds all specifications as stated in the referenced procedure (unless otherwise noted). It has been calibrated using measurement standards traceable to the International System of Units (SI) through the National Institute of Standards and Technology (NIST), or other national measurement institutes, and meets the requirements of ISO/IEC 17025:2017.
Test points marked with a ‡ in the uncertainties column do not fall within this laboratory's scope of accreditation.

The quality system is registered to ISO 9001:2015.

This calibration is a direct comparison of the unit under test to the listed reference standards and did not involve any sampling plans to complete. No allowance has been made for the instability of the test device due to use, time, etc. Such allowances would be made by the customer as needed.

The uncertainties were computed in accordance with the ISO Guide to the Expression of Uncertainty in Measurement (GUM). A coverage factor of approximately 2 sigma (k=2) has been applied to the standard uncertainty to express the expanded uncertainty at approximately 95% confidence level.

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Correction data from Larson Davis LxT Manual for SoundTrack LxT & SoundExpert Lxt, I770.01 Rev O Supporting Firmware Version 4.0.5, 2019-09-10

For 1/4" microphones, the Larson Davis ADP024 1/4" to 1/2" adaptor is used with the calibrators and the Larson Davis ADP043 1/4" to

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716-684-0001

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CERTIFICATO DI TARATURA DELLA STRUMENTAZIONE

Calibration Certificate

Certificate Number 2022014525

Customer:
Spectra
Via J.F. Kennedy, 19
Vimercate, MB 20871, Italy

Model Number	CAL200	***Procedure Number***	D0001.8386
Serial Number	20730	***Technician***	Scott Montgomery
Test Results	**Pass**	***Calibration Date***	10 Nov 2022
Initial Condition	As Manufactured	***Calibration Due***	
Description	Larson Davis CAL200 Acoustic Calibrator	***Temperature***	22 °C ± 0.3 °C
		Humidity	37 %RH ± 3 %RH
		Static Pressure	101.2 kPa ± 1 kPa

Evaluation Method The data is aquired by the insert voltage calibration method using the reference microphone's open circuit sensitivity. Data reported in dB re 20 µPa.

Compliance Standards Compliant to Manufacturer Specifications per D0001.8190 and the following standards:
IEC 60942:2017 ANSI S1.40-2006

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Standards Used

Description	Cal Date	Cal Due	Cal Standard
Agilent 34401A DMM	07/07/2022	07/07/2023	001021
Larson Davis Model 2900 Real Time Analyzer	03/31/2022	03/31/2023	001051
Microphone Calibration System	02/23/2022	02/23/2023	005446
1/2" Preamplifier	08/23/2022	08/23/2023	006506
Larson Davis 1/2" Preamplifier 7-pin LEMO	08/08/2022	08/08/2023	006507
1/2 inch Microphone - RI - 200V	03/24/2022	03/24/2023	006511
Hart Scientific 2626-S Humidity/Temperature Sensor	07/29/2021	01/29/2023	006946
Pressure Sensor	03/15/2022	12/14/2022	PCB0087008

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