

ENVIRONMENTAL STATEMENT (VOLUME III)

Appendix 15.1 Baseline Noise Data

HyNet Carbon Dioxide Pipeline DCO

Planning Act 2008

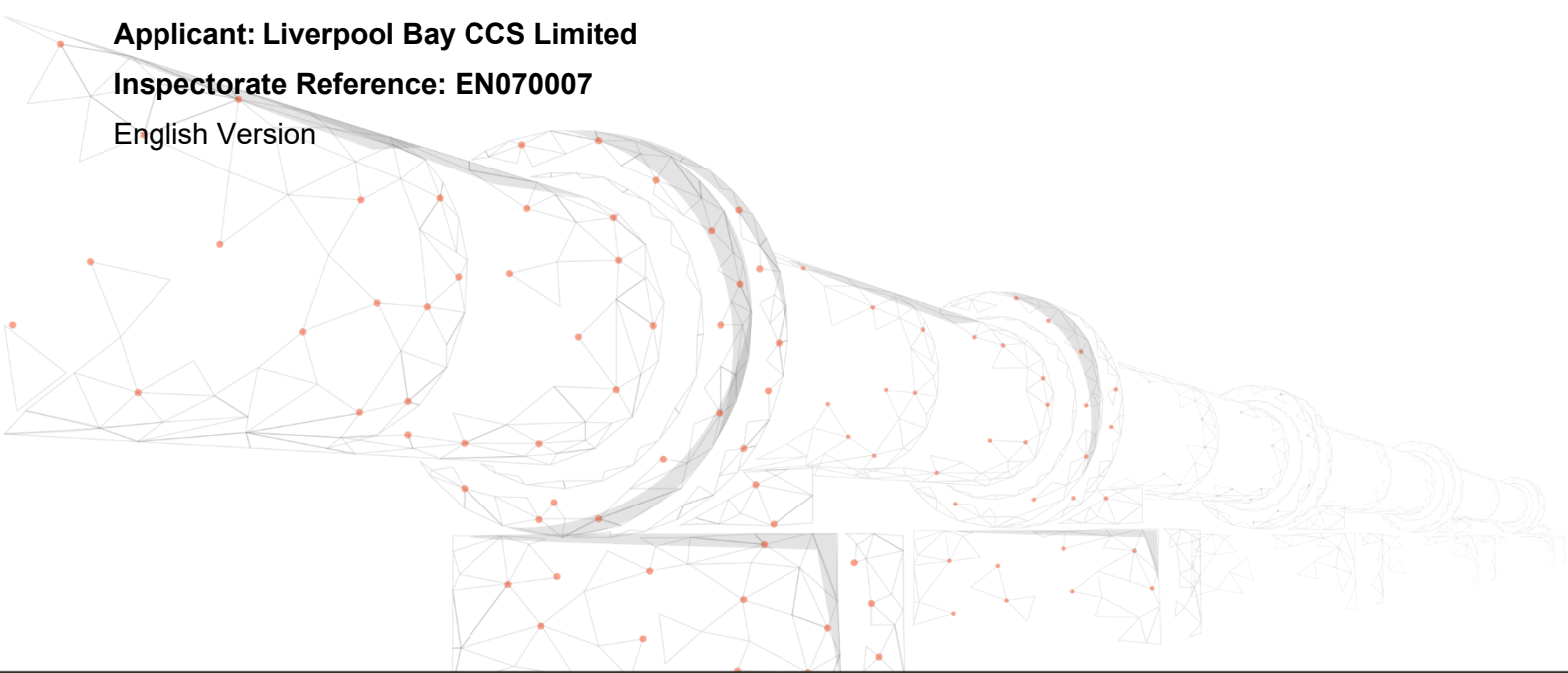
The Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009 –
Regulations 5(2)(a)

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1. SUMMARY NOISE LEVELS

1.1.1. The following tables present the data collected during the long term (LT) and short-term (ST) noise monitoring. The noise monitoring locations are presented in **Figure 15.1 - Environmental Noise Survey Locations and Noise Constraints**.

Table 1 - Long Term Environmental Noise Survey Summary

Location	Period, T	Measured Noise Level (dB)		
		L _{Aeq, T}	Typical L _A F _{max} *	Typical L _{A90, T}
LT 1	Daytime (07:00 – 23:00)	60	-	54
	Night-time (23:00 – 07:00)	56	77	47
LT 2	Daytime (07:00 – 23:00)	59	-	44
	Night-time (23:00 – 07:00)	54	77	45
LT 3	Daytime (07:00 – 23:00)	60	-	52
	Night-time (23:00 – 07:00)	55	70	44
LT 4	Daytime (07:00 – 23:00)	54	-	46
	Night-time (23:00 – 07:00)	48	63	38
LT 5	Daytime (07:00 – 23:00)	53	-	45
	Night-time (23:00 – 07:00)	46	66	36
LT 6	Daytime (07:00 – 23:00)	50	-	39
	Night-time (23:00 – 07:00)	41	62	31
LT 7	Daytime (07:00 – 23:00)	46	-	38
	Night-time (23:00 – 07:00)	41	63	32
LT 8	Daytime (07:00 – 23:00)	50	-	40
	Night-time (23:00 – 07:00)	48	66	34
LT 9	Daytime (07:00 – 23:00)	51	-	43
	Night-time (23:00 – 07:00)	44	70	36
LT 10	Daytime (07:00 – 23:00)	53	-	45
	Night-time (23:00 – 07:00)	47	70	35
LT 11	Daytime (07:00 – 23:00)	63	-	58
	Night-time (23:00 – 07:00)	57	70	44

Location	Period, T	Measured Noise Level (dB)		
		L _{Aeq, T}	Typical L _{AFmax*}	Typical L _{A90, T}
LT 12	Daytime (07:00 – 23:00)	46	-	39
	Night-time (23:00 – 07:00)	41	65	32
LT 13	Daytime (07:00 – 23:00)	48	-	38
	Night-time (23:00 – 07:00)	45	73	30
LT 14	Daytime (07:00 – 23:00)	50	-	43
	Night-time (23:00 – 07:00)	49	76	34
LT 15	Daytime (07:00 – 23:00)	53	-	37
	Night-time (23:00 – 07:00)	51	73	31
LT 16	Daytime (07:00 – 23:00)	47	-	37
	Night-time (23:00 – 07:00)	41	63	29

*10th Highest L_{max} during Period

Table 2 - Long Term Summary of Ambient Noise Levels

Location	Average L _{Aeq, T} (dB)		
	Daytime (07:00 – 19:00)	Evening (19:00 – 23:00)	Night-time (23:00 – 07:00)
LT 1	65	58	56
LT 2	55	51	55
LT 3	61	59	56
LT 4	57	51	49
LT 5	57	50	45
LT 6	52	42	40
LT 7	47	41	40
LT 8	51	46	49
LT 9	52	52	44
LT 10	53	50	46
LT 11	63	59	57
LT 12	46	43	40
LT 13	50	43	44

Location	Average L _{Aeq, T} (dB)		
	Daytime (07:00 – 19:00)	Evening (19:00 – 23:00)	Night-time (23:00 – 07:00)
LT 14	51	46	49
LT 15	53	50	48
LT 16	49	42	41

Table 3 - Short Term Environmental Noise Survey Data

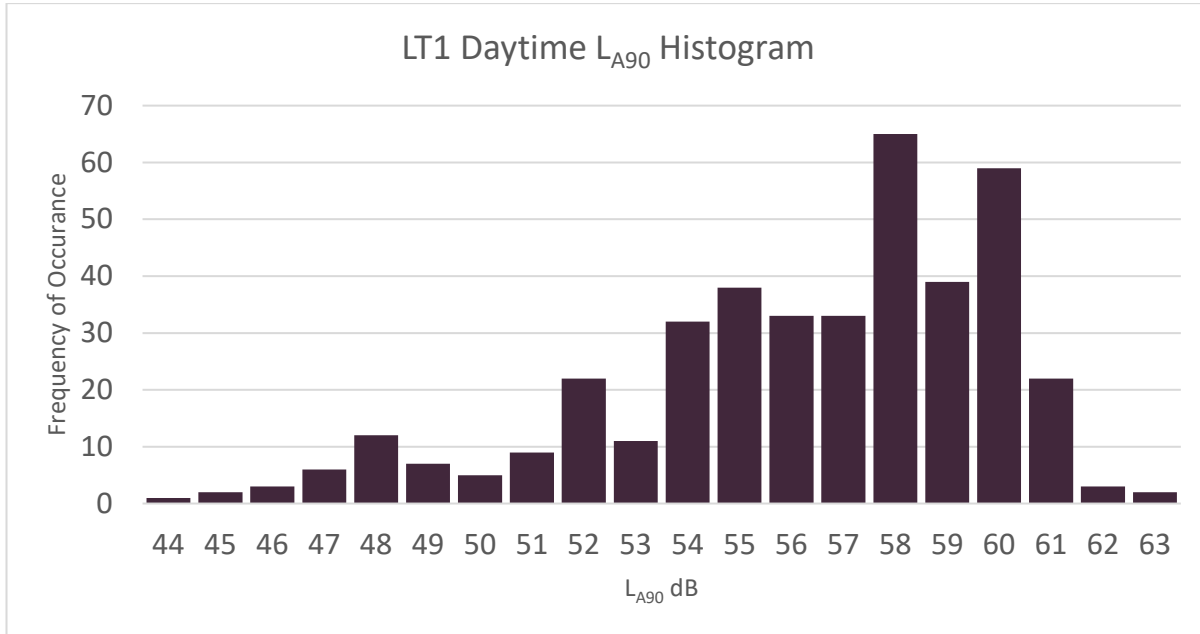
Location	Date	Time	Measured Noise Level (dB)		
			L _{Aeq, T}	Typical L _{AFmax*}	Typical L _{A90, T}
ST 1	14/10/2021	10:30	51	62	48
	14/10/2021	17:00	53	66	52
	14/10/2021	18:00	54	73	52
	20/10/2021	19:00	51	62	49
	20/10/2021	20:00	53	62	51
	20/10/2021	21:00	52	62	49
ST 2	17/03/2021	19:49	55	63	54
	17/03/2021	20:49	54	61	52
	17/03/2021	21:34	57	66	55
	17/03/2021	11:34	56	64	54
	17/03/2021	13:11	56	60	55
ST 3	21/10/2021	19:00	52	70	48
	21/10/2021	21:00	48	57	46
	21/10/2021	22:00	46	56	44
	22/10/2021	11:00	57	76	50
	22/10/2021	13:00	56	74	50
	22/10/2021	15:30	53	62	50
ST 4	21/10/2021	19:30	49	65	45
	21/10/2021	21:30	50	71	43
	21/10/2021	22:30	45	63	41
	22/10/2021	11:30	54	72	50

Location	Date	Time	Measured Noise Level (dB)		
			L _{Aeq, T}	Typical L _{AFmax*}	Typical L _{A90, T}
	22/10/2021	13:30	53	69	49
	22/10/2021	16:00	50	65	45
ST 5	21/10/2021	20:30	52	68	45
	21/10/2021	21:45	51	64	42
	21/10/2021	22:45	47	62	40
	22/10/2021	12:15	60	82	49
	22/10/2021	14:15	57	72	50
	22/10/2021	16:45	56	70	49
ST 6	03/11/2021	20:30	48	69	45
	04/11/2021	11:15	56	78	48
	04/11/2021	12:15	54	75	46
	04/11/2021	14:30	52	72	48
ST 7	03/11/2021	20:00	45	58	44
	04/11/2021	10:45	58	83	50
	04/11/2021	11:45	52	68	48
	04/11/2021	12:45	52	68	49
ST 8	27/10/2021	15:15	51	69	47
	27/10/2021	16:15	49	64	45
	27/10/2021	19:00	48	66	45
	27/10/2021	20:00	47	64	44
	27/10/2021	21:00	46	59	43
	28/10/2021	10:30	40	52	38
ST 9	03/11/2021	11:36	46	40	42
	03/11/2021	20:07	43	50	41
	04/11/2021	12:32	46	56	43
	04/11/2021	10:44	46	62	43
ST 10	03/11/2021	15:15	62	78	48
	03/11/2021	19:00	61	79	45

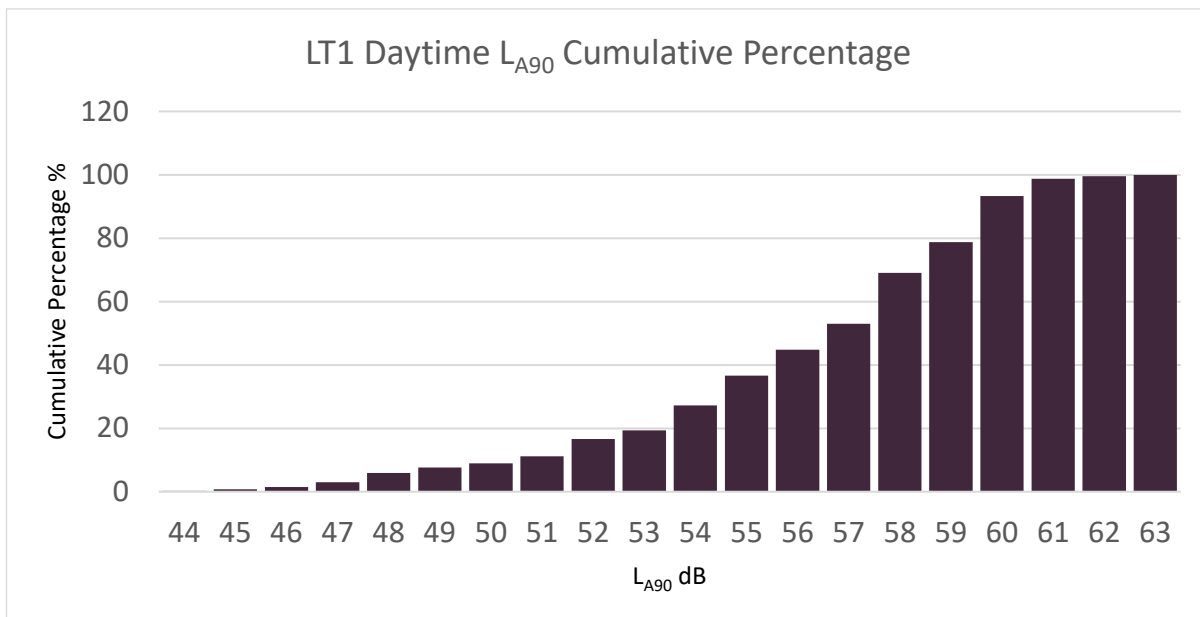
Location	Date	Time	Measured Noise Level (dB)		
			L _{Aeq, T}	Typical L _{AFmax*}	Typical L _{A90, T}
	04/11/2021	09:45	61	77	45
	04/11/2021	14:15	62	78	48
ST 11	03/11/2021	14:45	47	64	43
	03/11/2021	19:30	44	57	40
	04/11/2021	09:15	48	58	44
	04/11/2021	10:15	47	59	43
ST 12	03/11/2021	14:15	62	78	48
	03/11/2021	15:15	62	78	48
	03/11/2021	19:00	61	79	45
	04/11/2021	09:45	61	77	45
ST 13	27/10/2021	15:15	62	79	56
	27/10/2021	16:15	59	75	56
	27/10/2021	19:00	62	74	56
	27/10/2021	20:00	57	68	53
	27/10/2021	21:00	57	71	53
	28/10/2021	10:30	53	60	51
ST 14	27/10/2021	13:00	49	63	46
	27/10/2021	15:45	60	71	53
	27/10/2021	19:30	56	71	49
	27/10/2021	20:30	58	68	52
	27/10/2021	21:45	57	70	52
	28/10/2021	11:00	48	65	43

2. BACKGROUND NOISE LEVELS

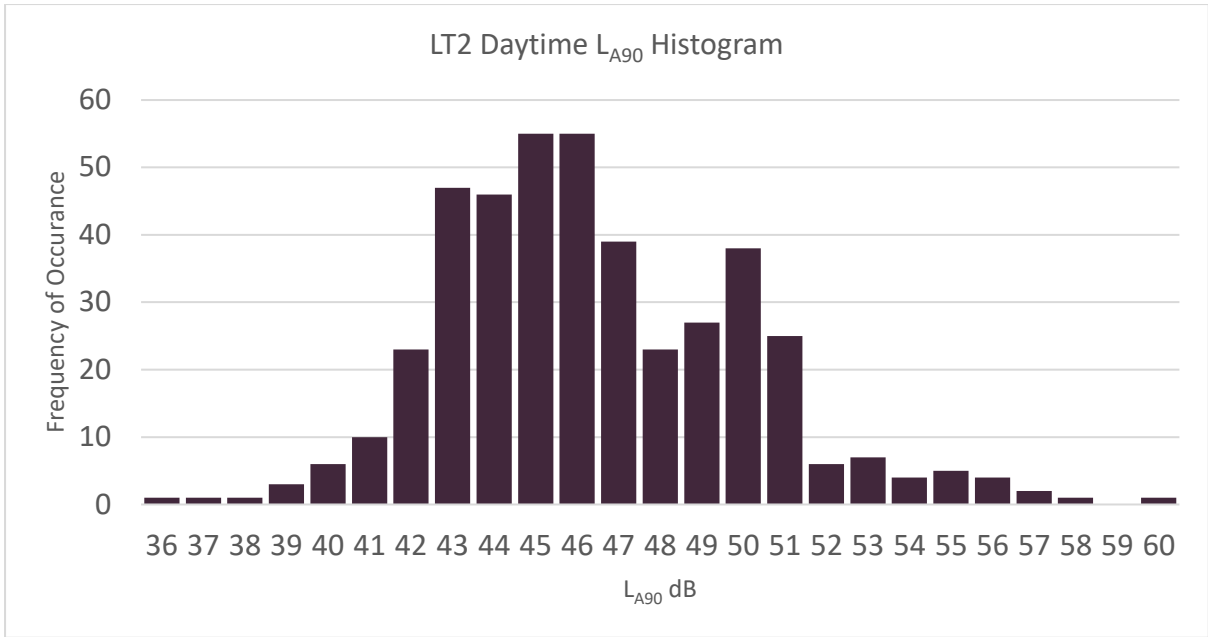
2.1.1. The following inserts present the statistical analysis of the background noise levels for the daytime (0700 – 2300) and night-time periods (2300 – 0700).



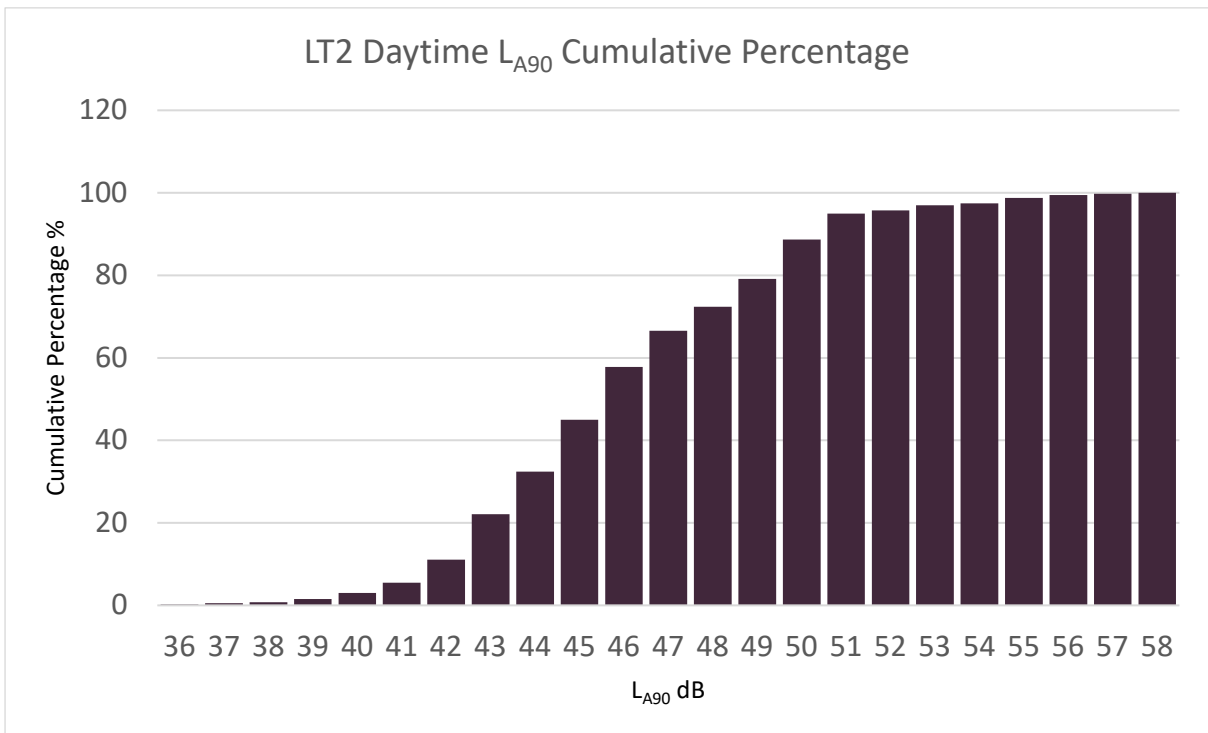
Insert 1 - LT1 Daytime Histogram



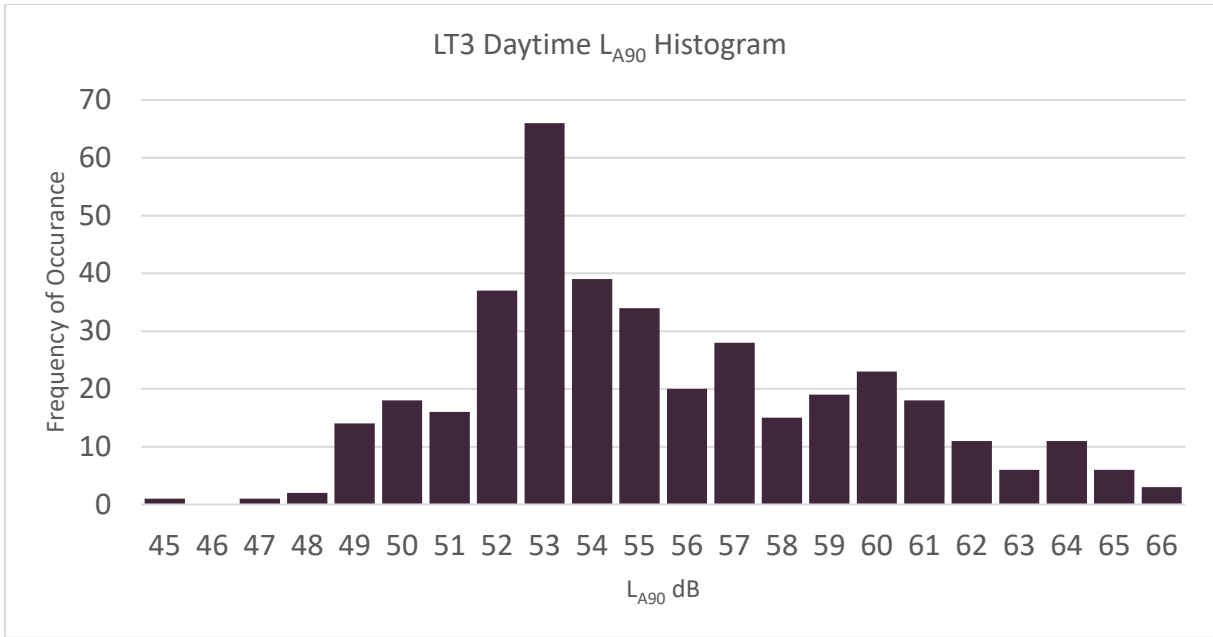
Insert 2 - LT1 Daytime Cumulative Percentage



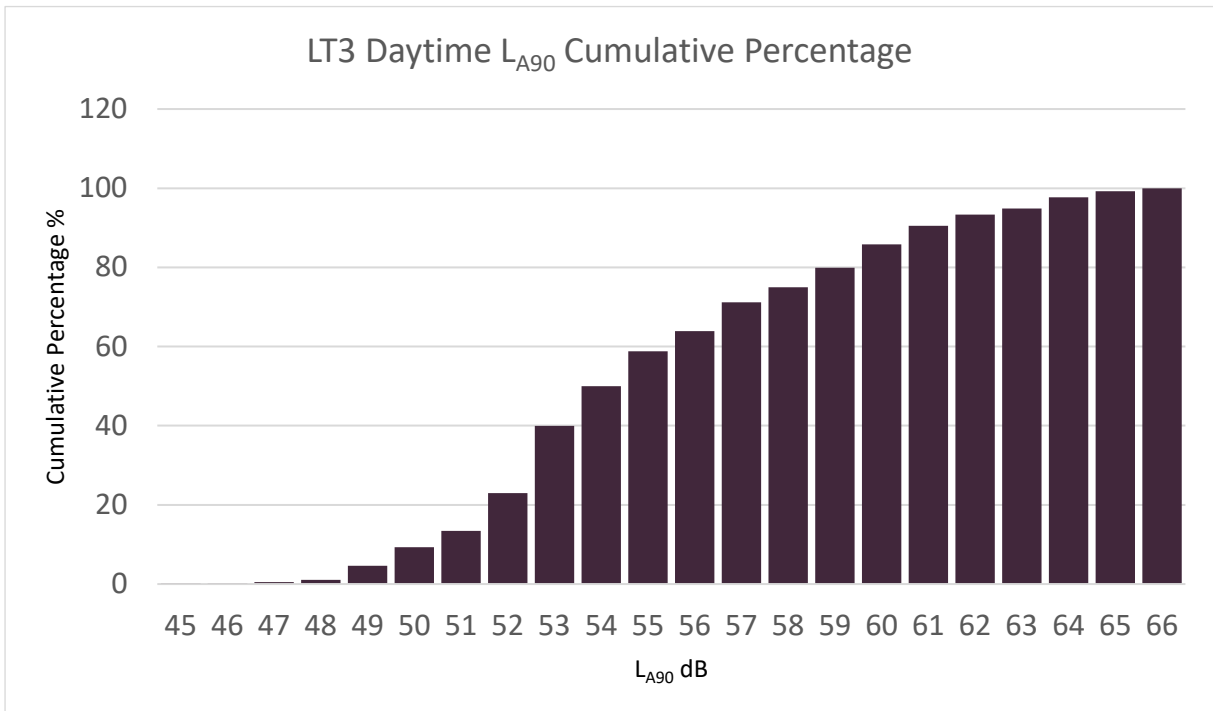
Insert 3 - LT2 Daytime Histogram



Insert 4 - LT2 Daytime Cumulative Percentage

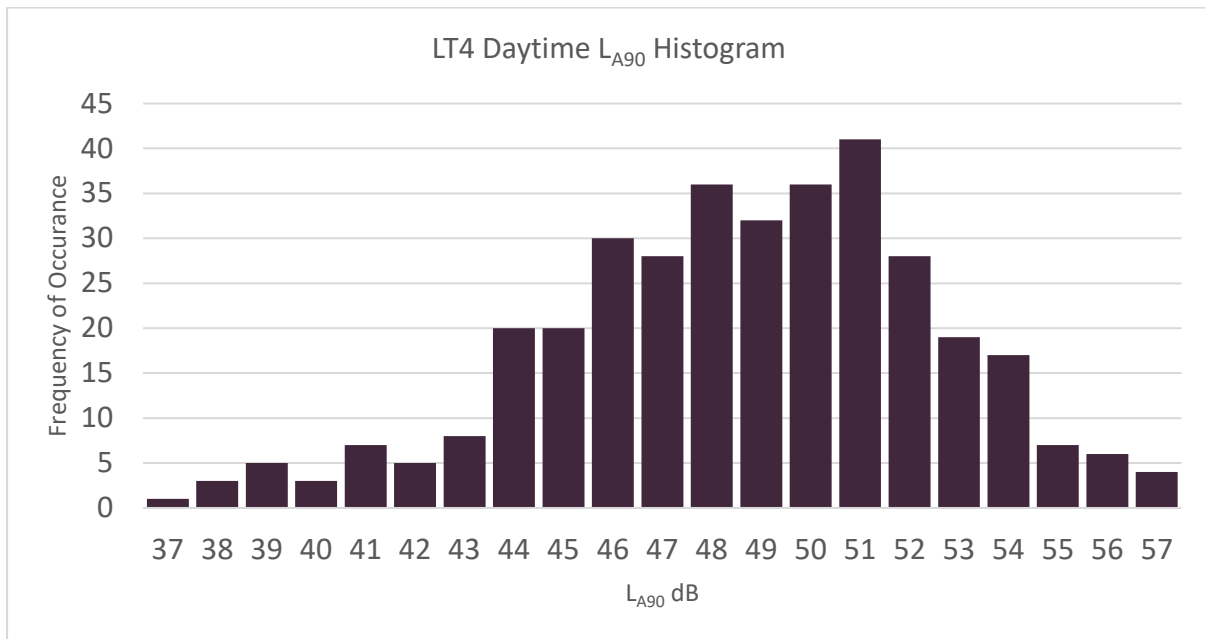


Insert 5 - LT3 Daytime Histogram

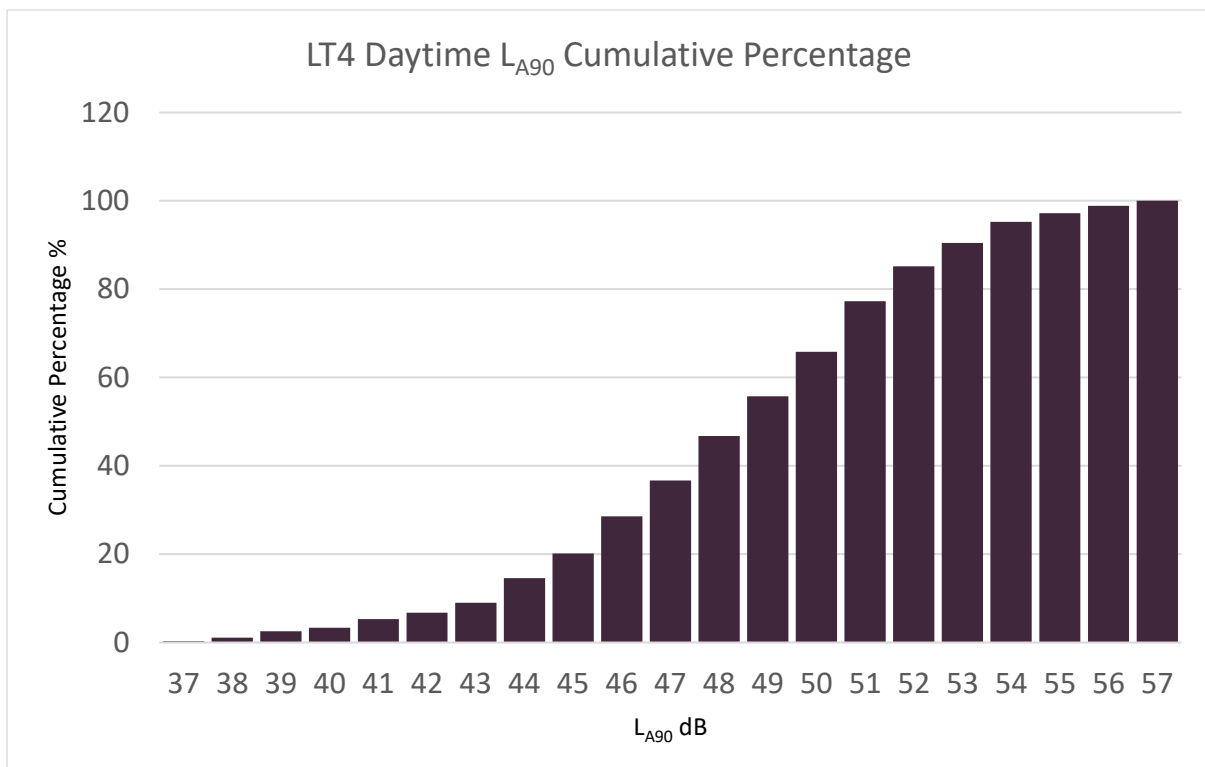


Insert 6 - LT3 Daytime Cumulative Percentage

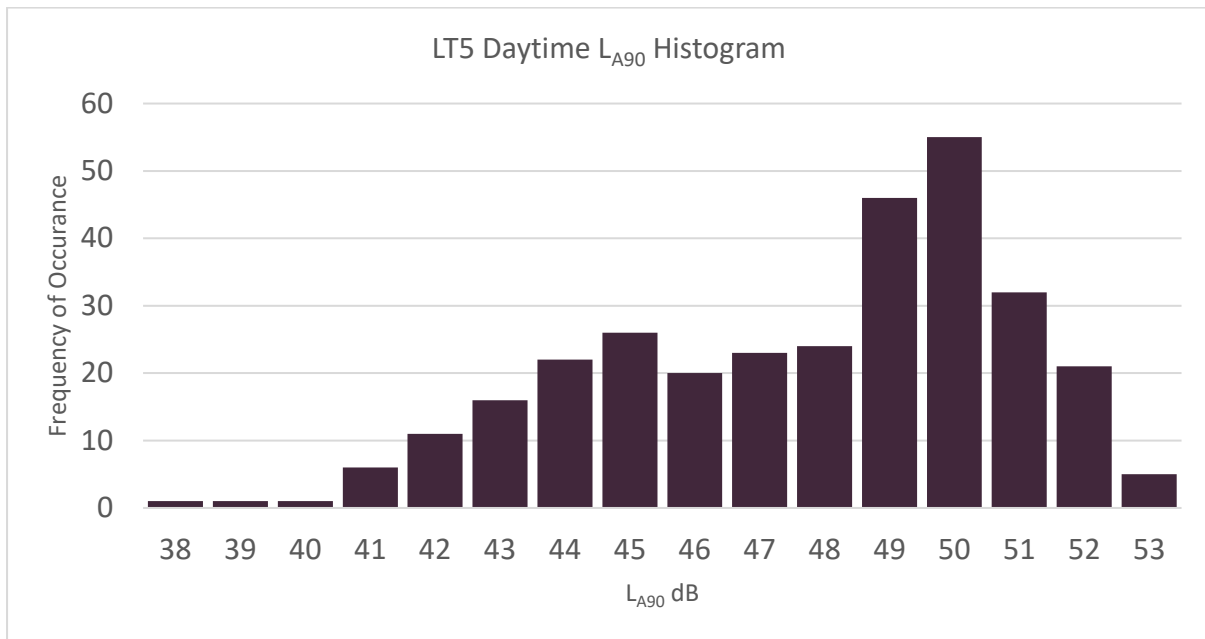
Insert 7 - LT4 Daytime Histogram



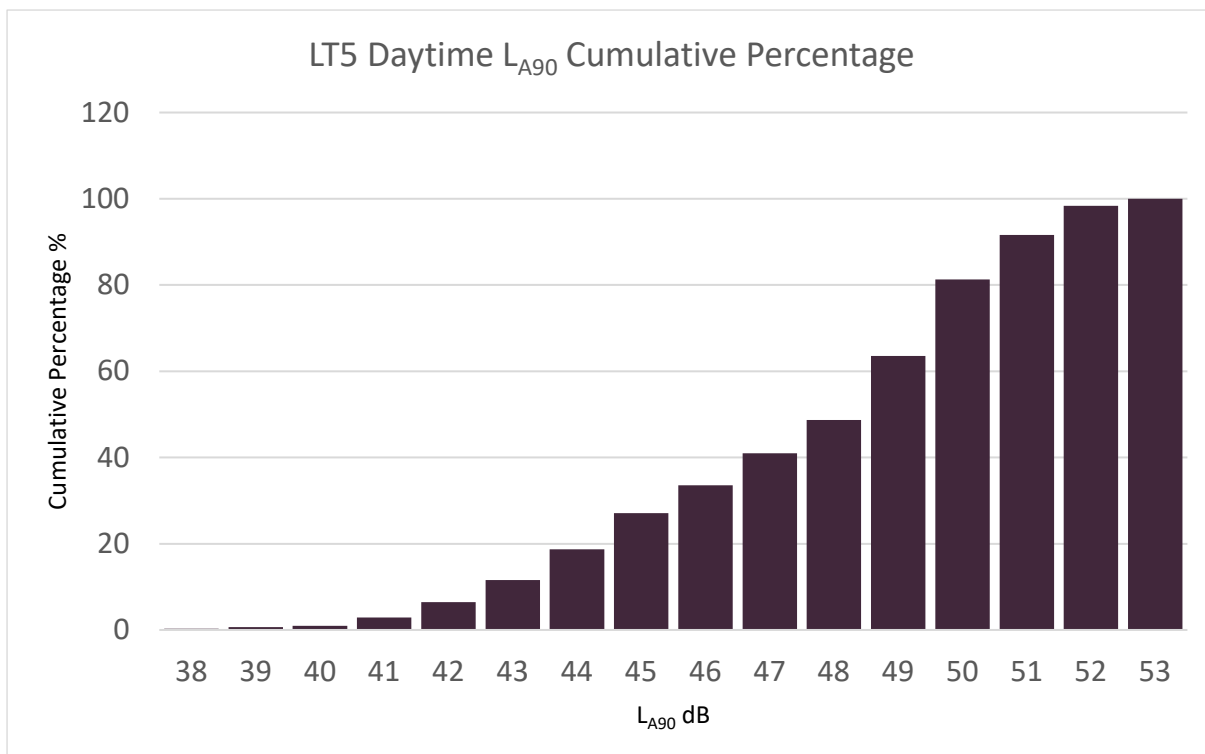
Insert 8 - LT4 Daytime Cumulative Percentage



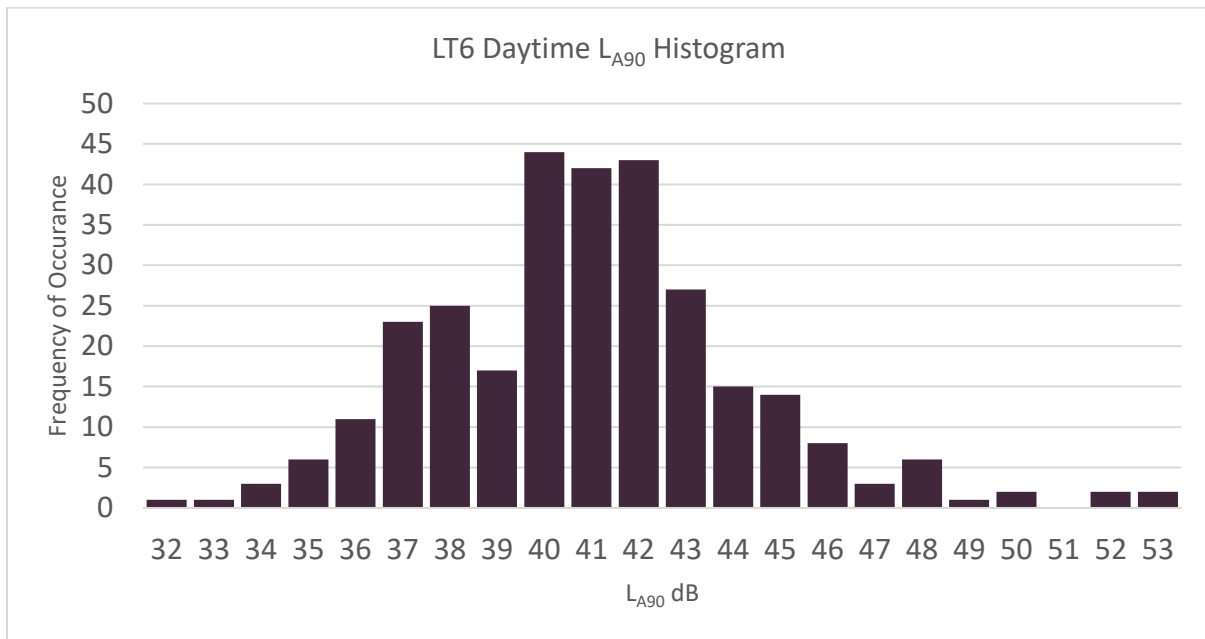
Insert 9 - LT5 Daytime Histogram



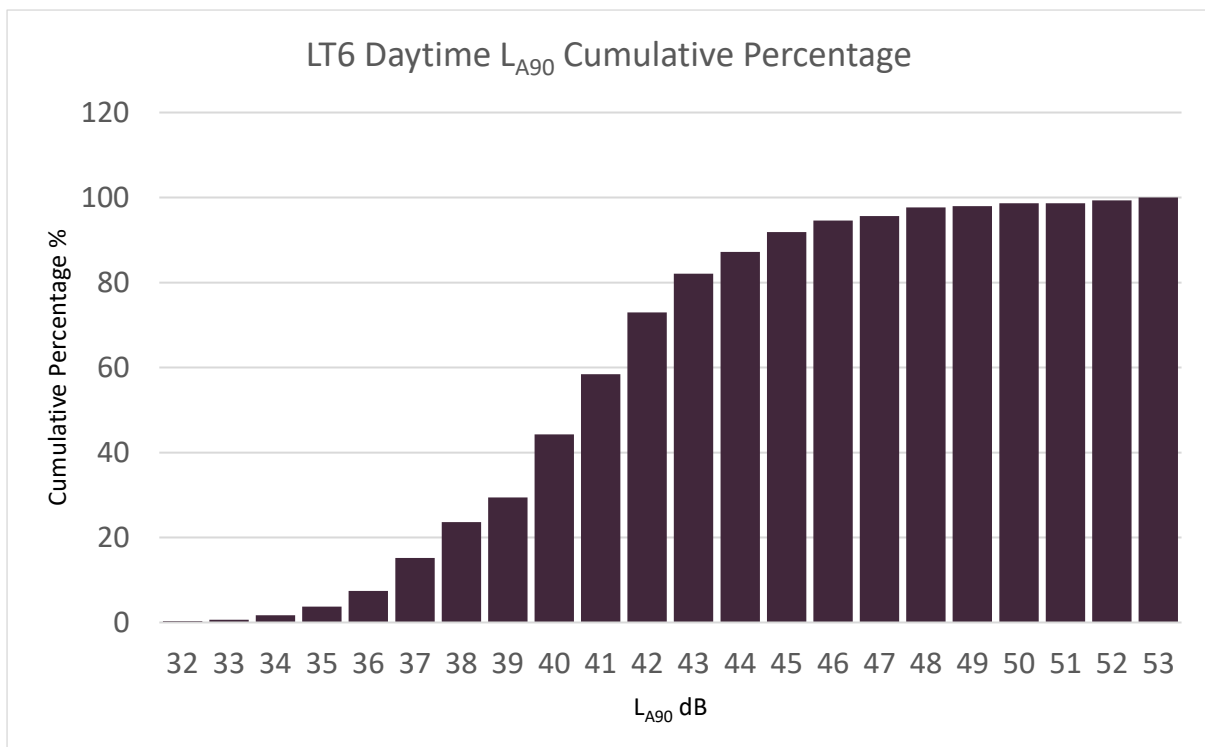
Insert 10 - LT5 Daytime Cumulative Percentage



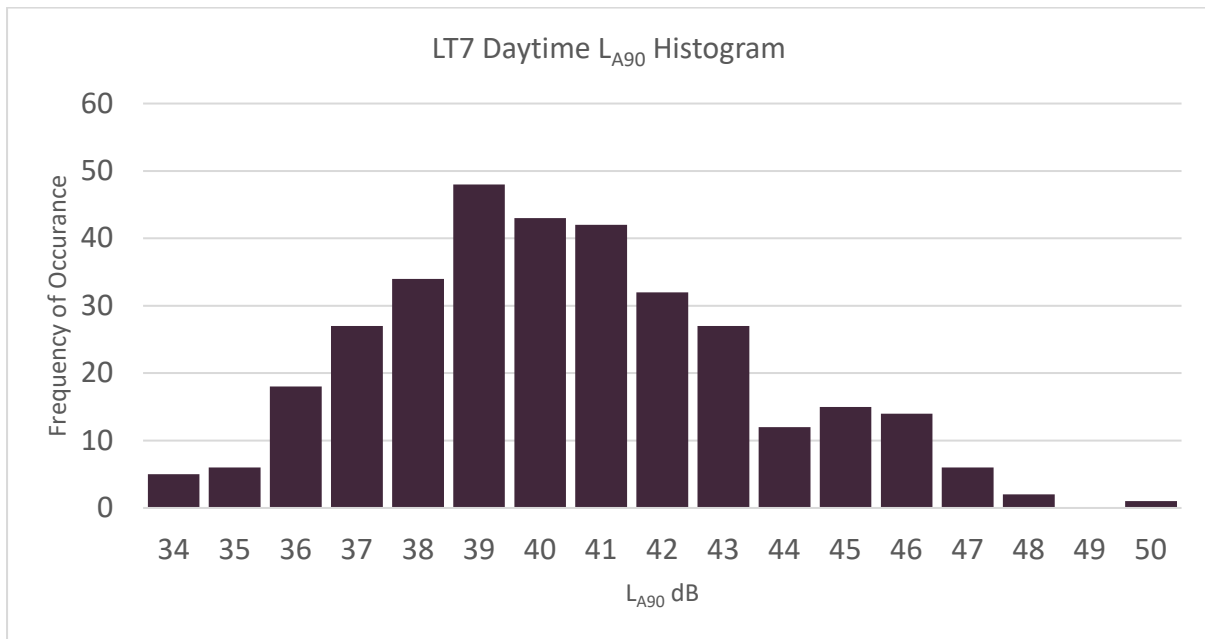
Insert 11 - LT6 Daytime Histogram



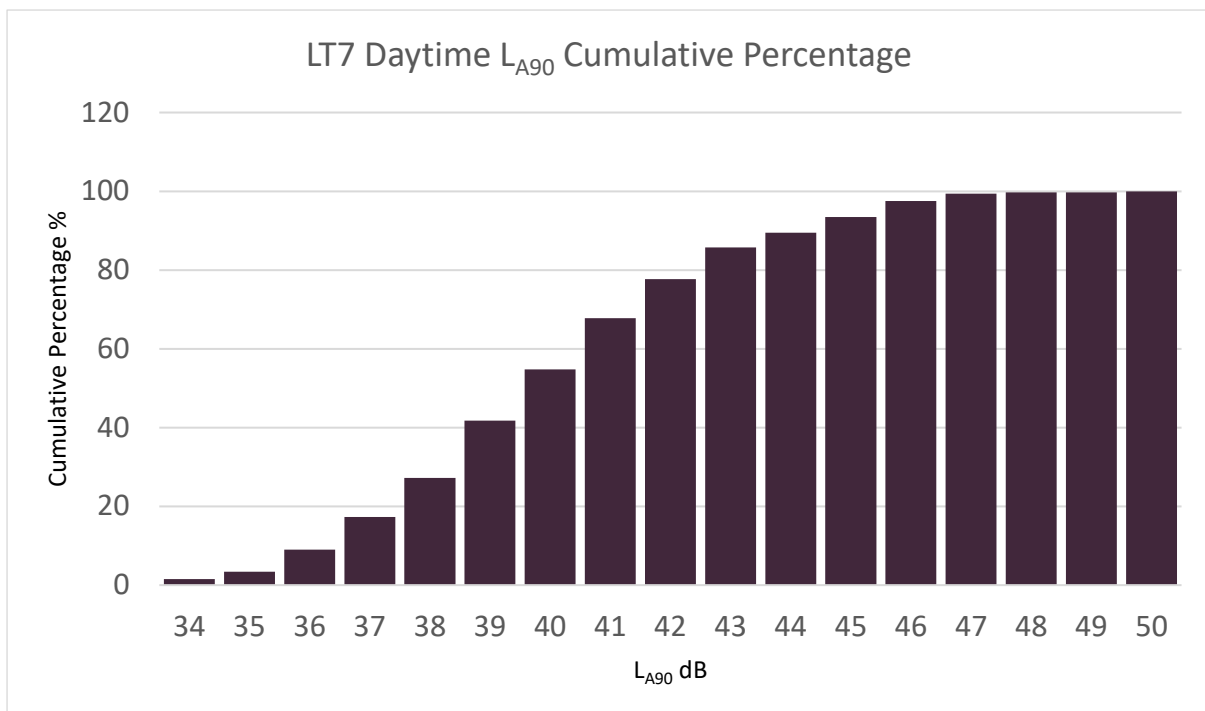
Insert 12 - LT6 Daytime Cumulative Percentage



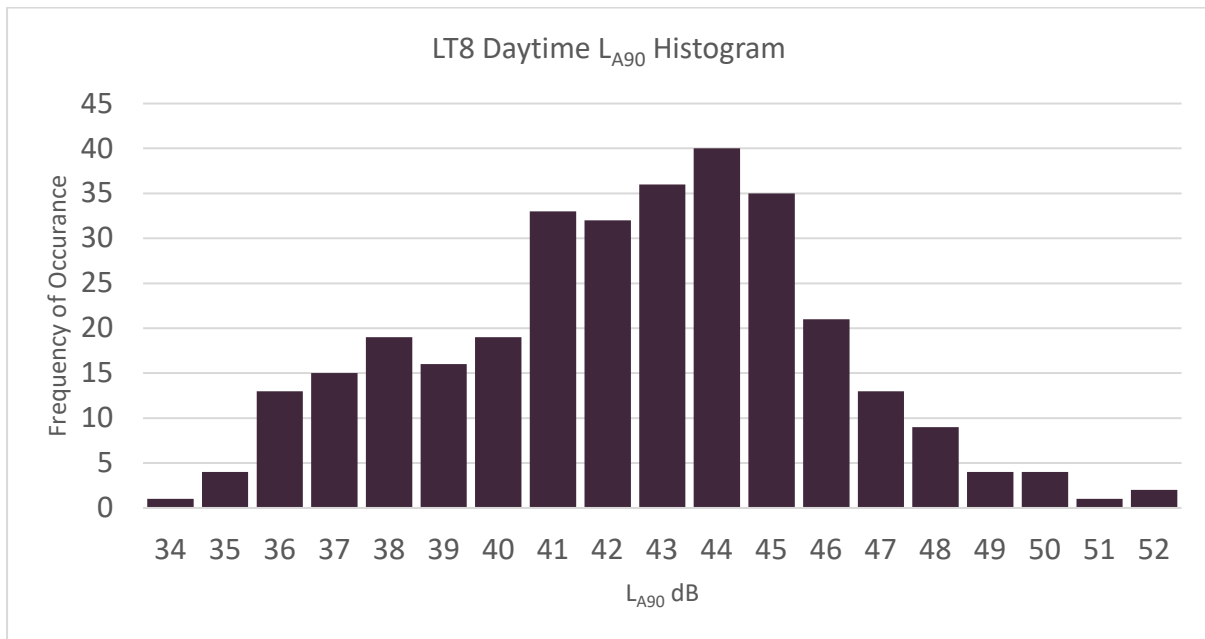
Insert 13 - LT7 Daytime Histogram



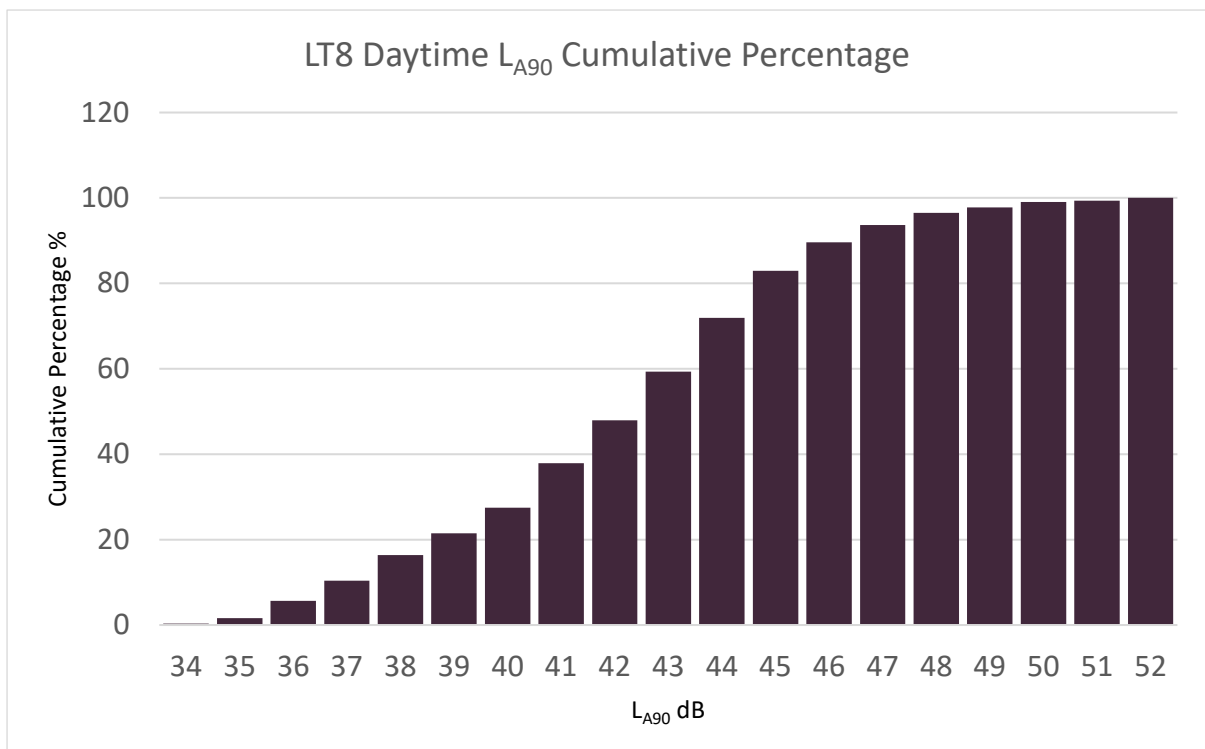
Insert 14 - LT7 Daytime Cumulative Percentage



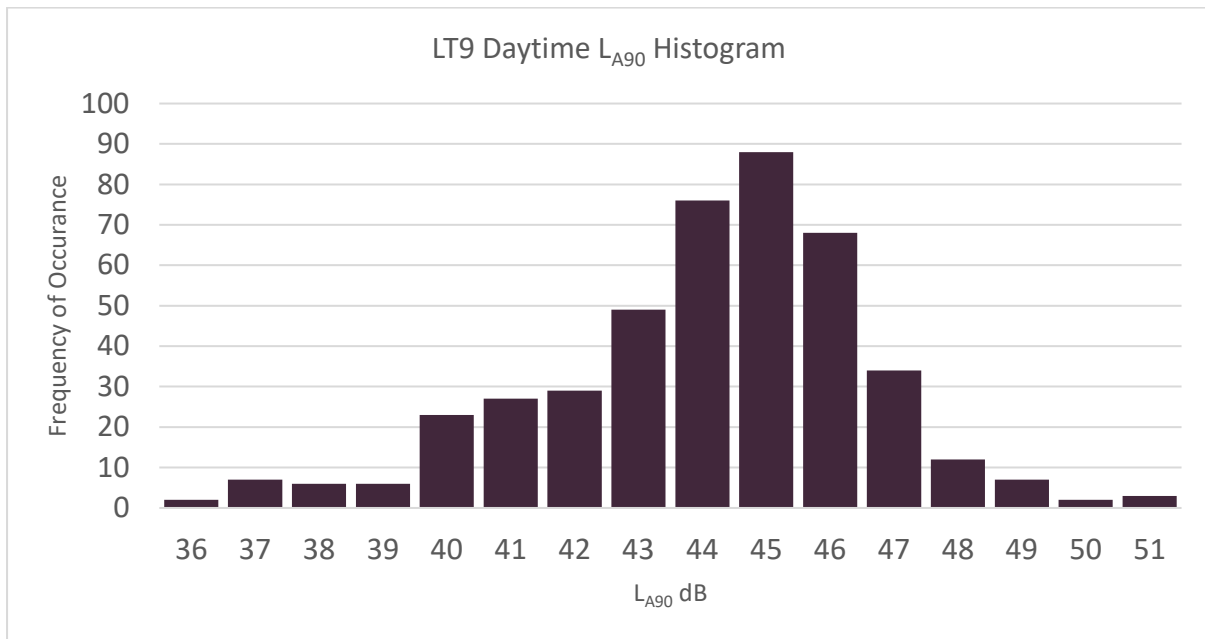
Insert 15 - LT8 Daytime Histogram



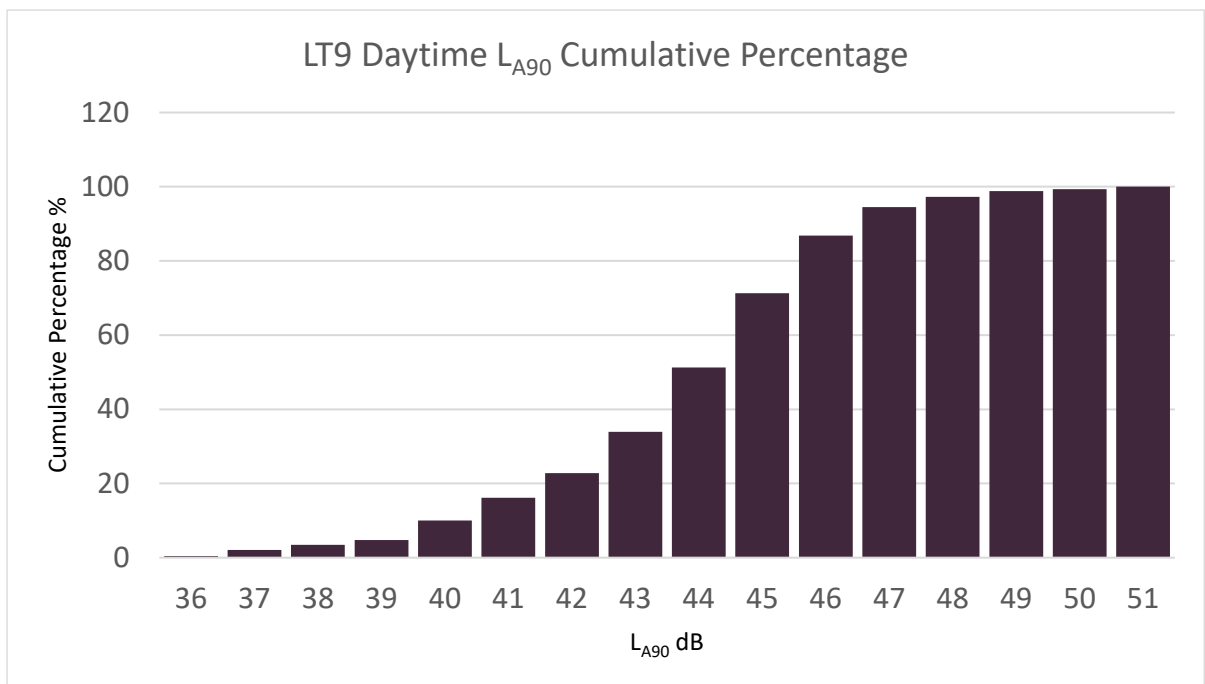
Insert 16 - LT8 Daytime Cumulative Percentage



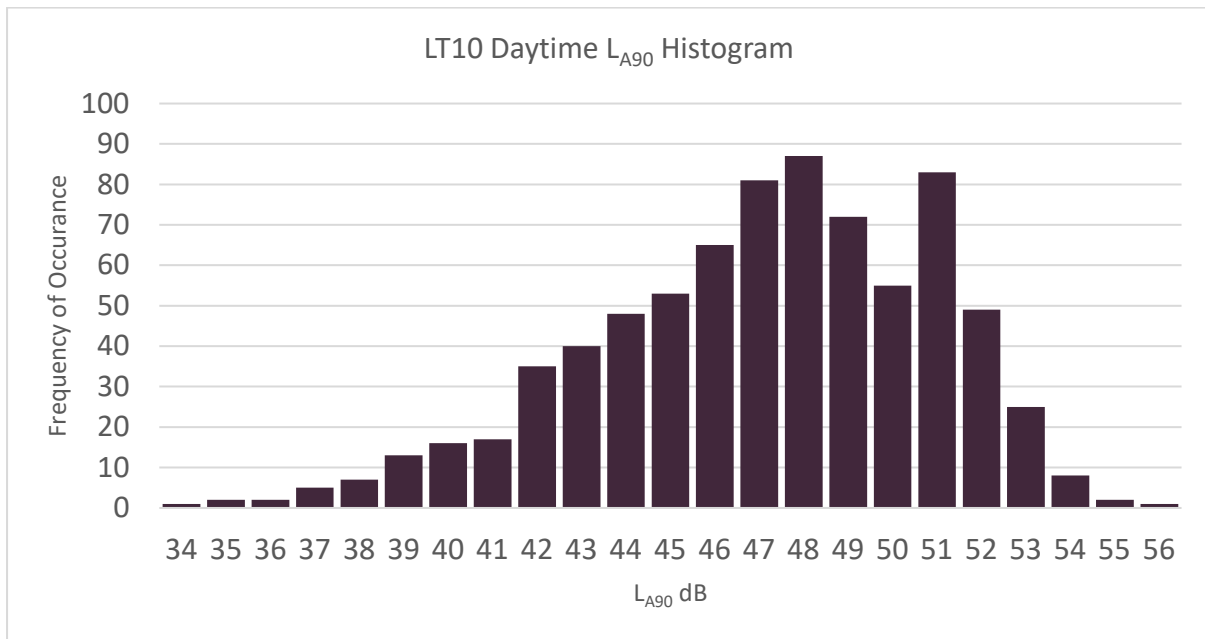
Insert 17 - LT9 Daytime Histogram



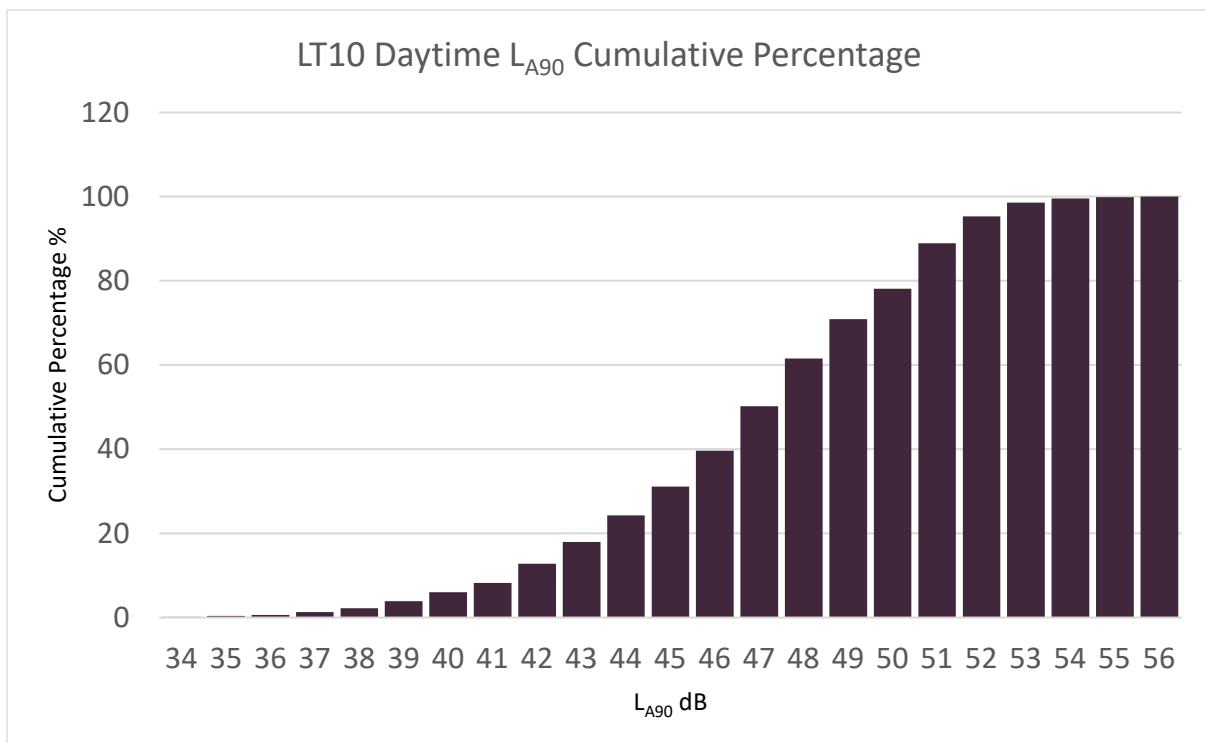
Insert 18 - LT9 Daytime Cumulative Percentage



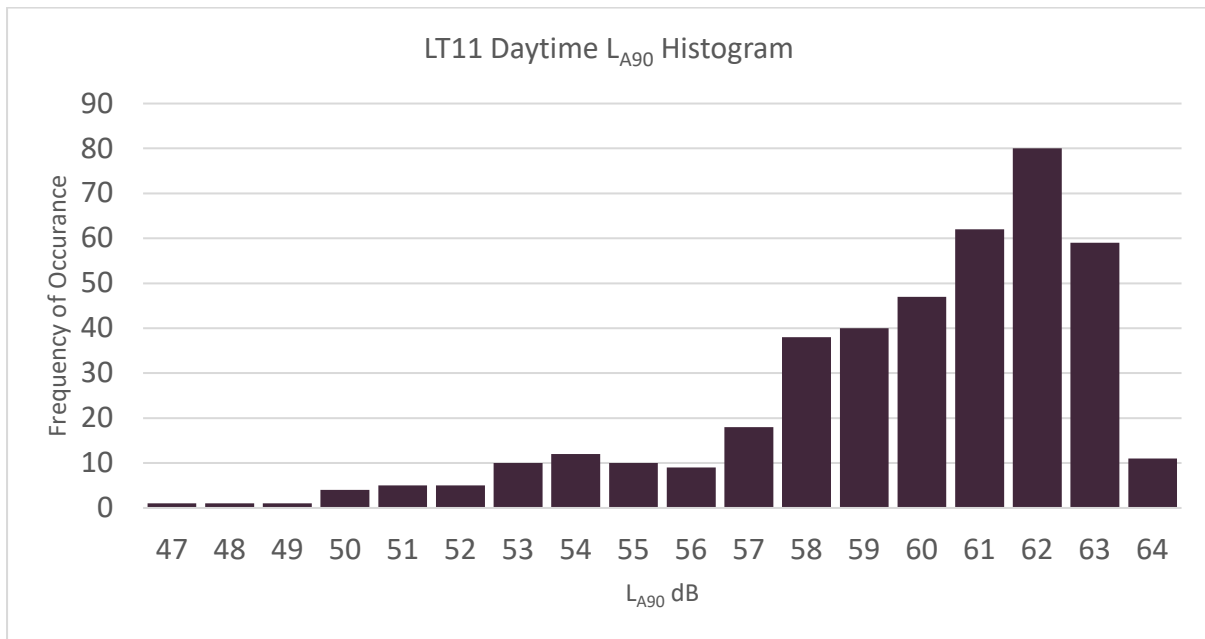
Insert 19 - LT10 Daytime Histogram



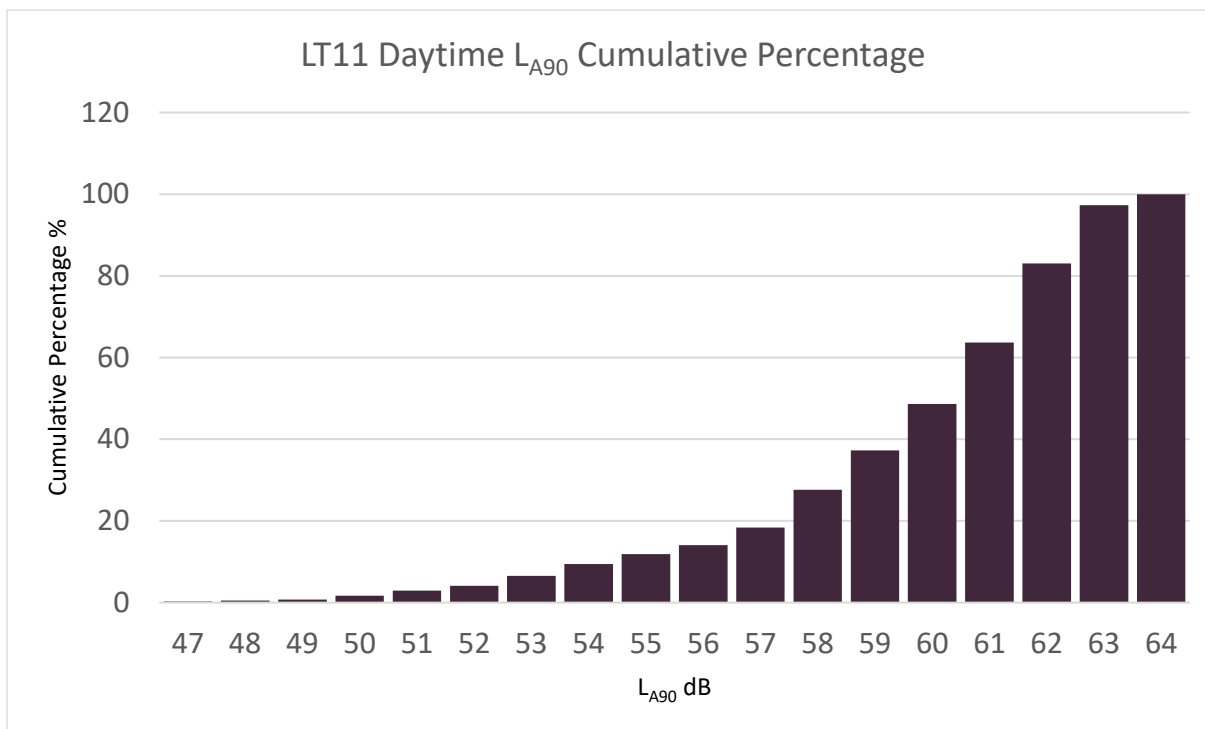
Insert 20 - LT10 Daytime Cumulative Percentage



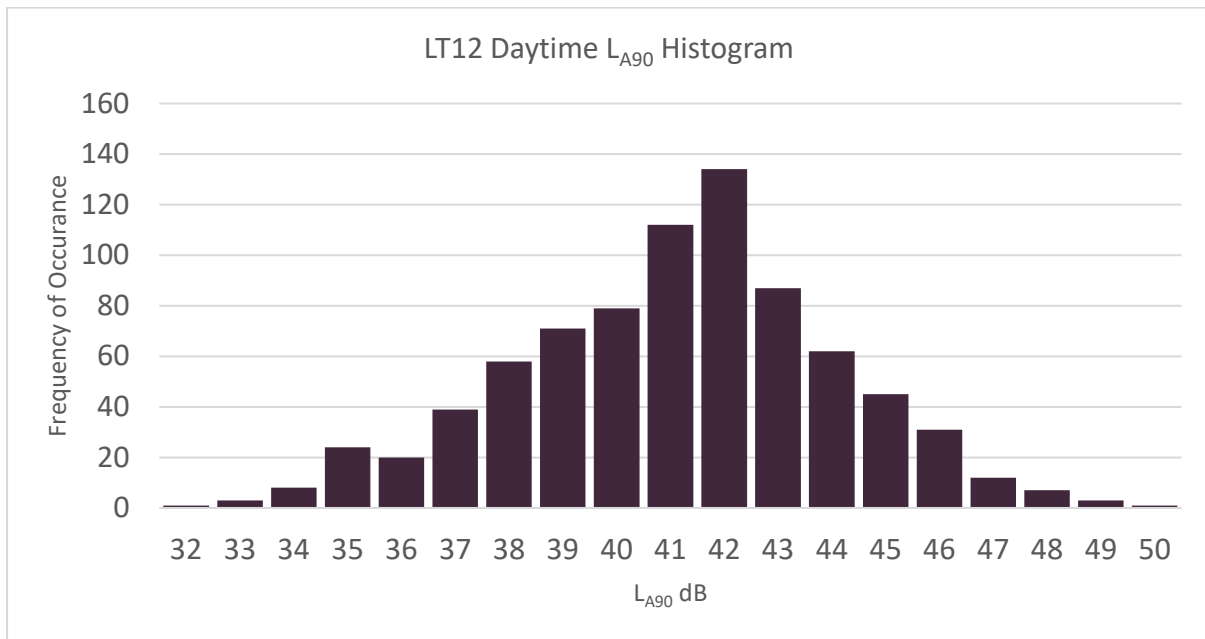
Insert 21 - LT11 Daytime Histogram



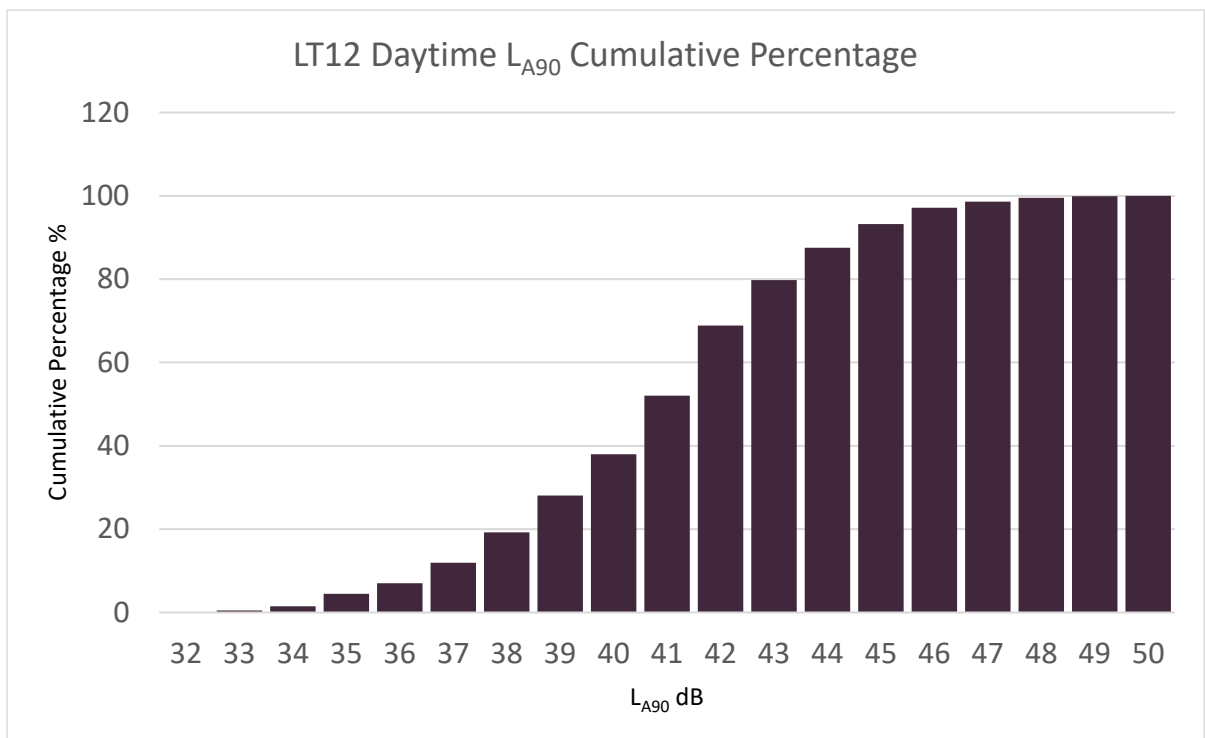
Insert 22 - LT11 Daytime Cumulative Percentage



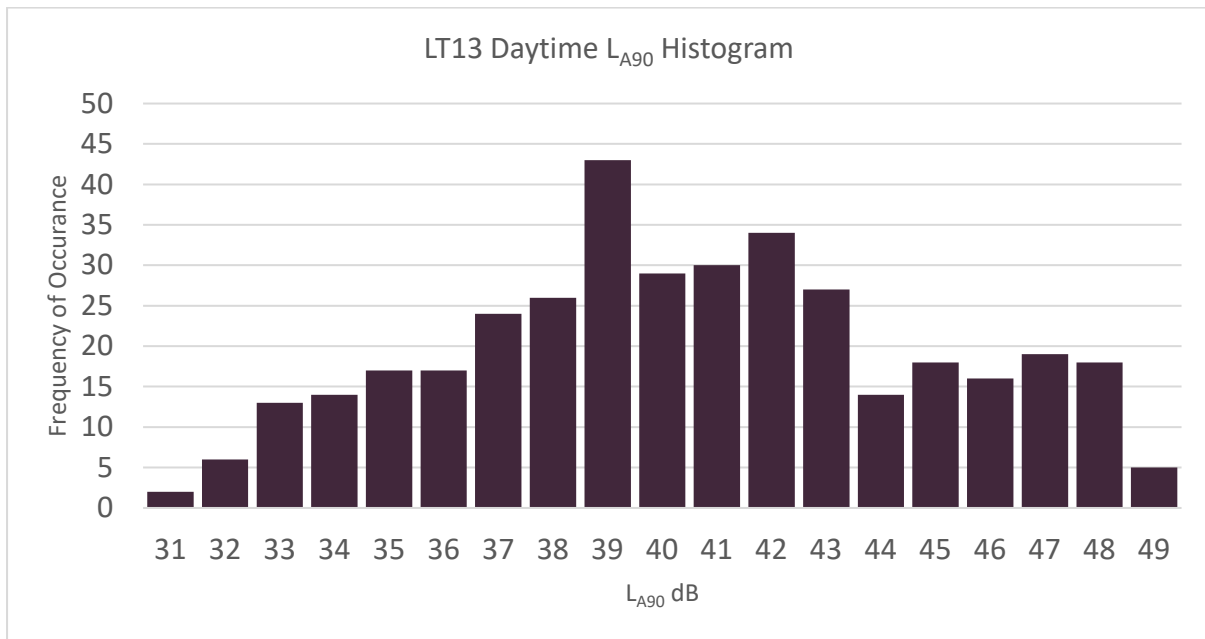
Insert 23 - LT12 Daytime Histogram



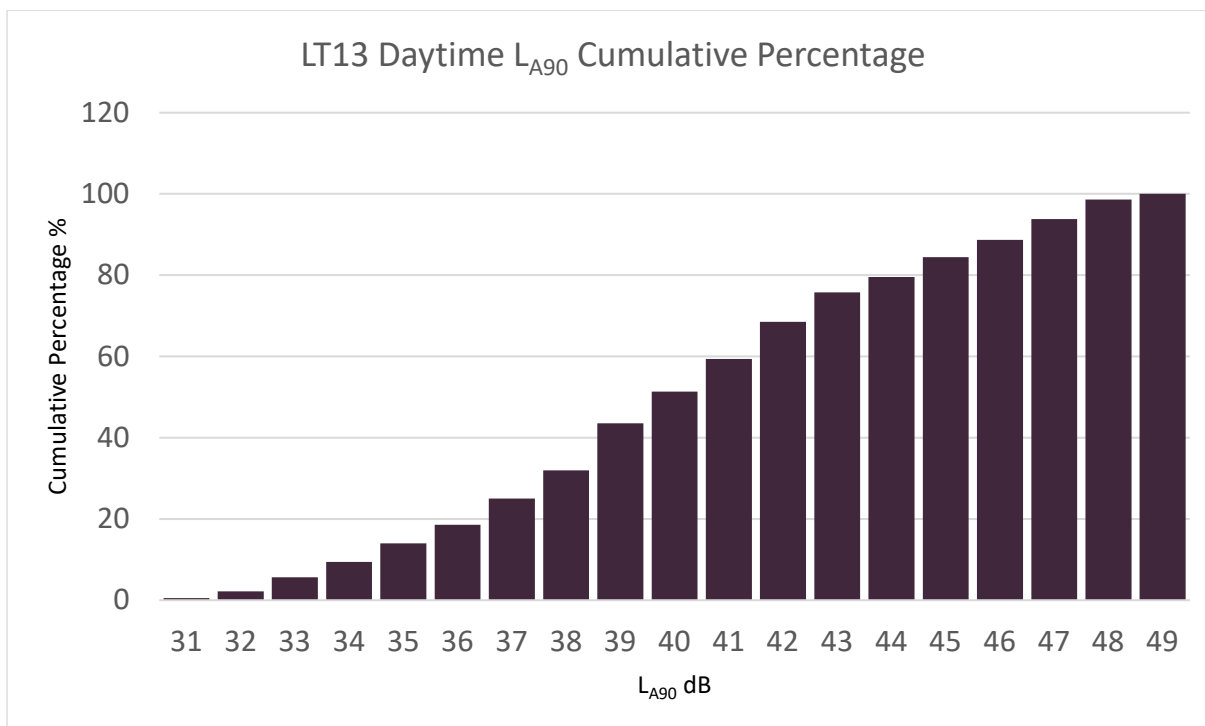
Insert 24 - LT12 Daytime Cumulative Percentage



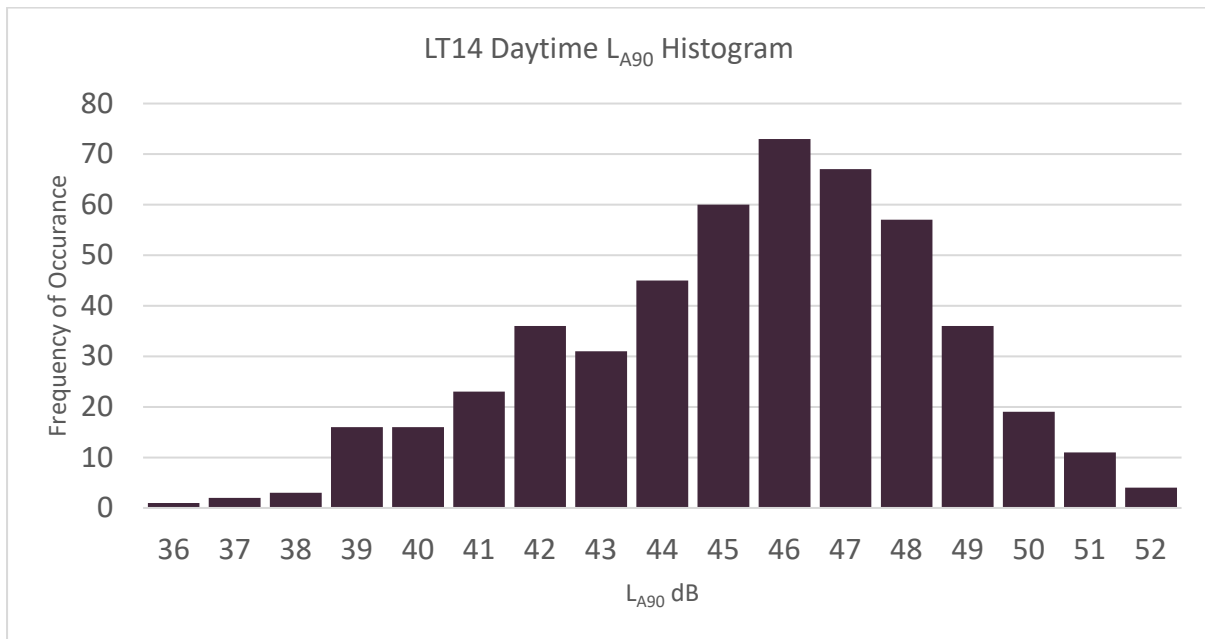
Insert 25 - LT13 Daytime Histogram



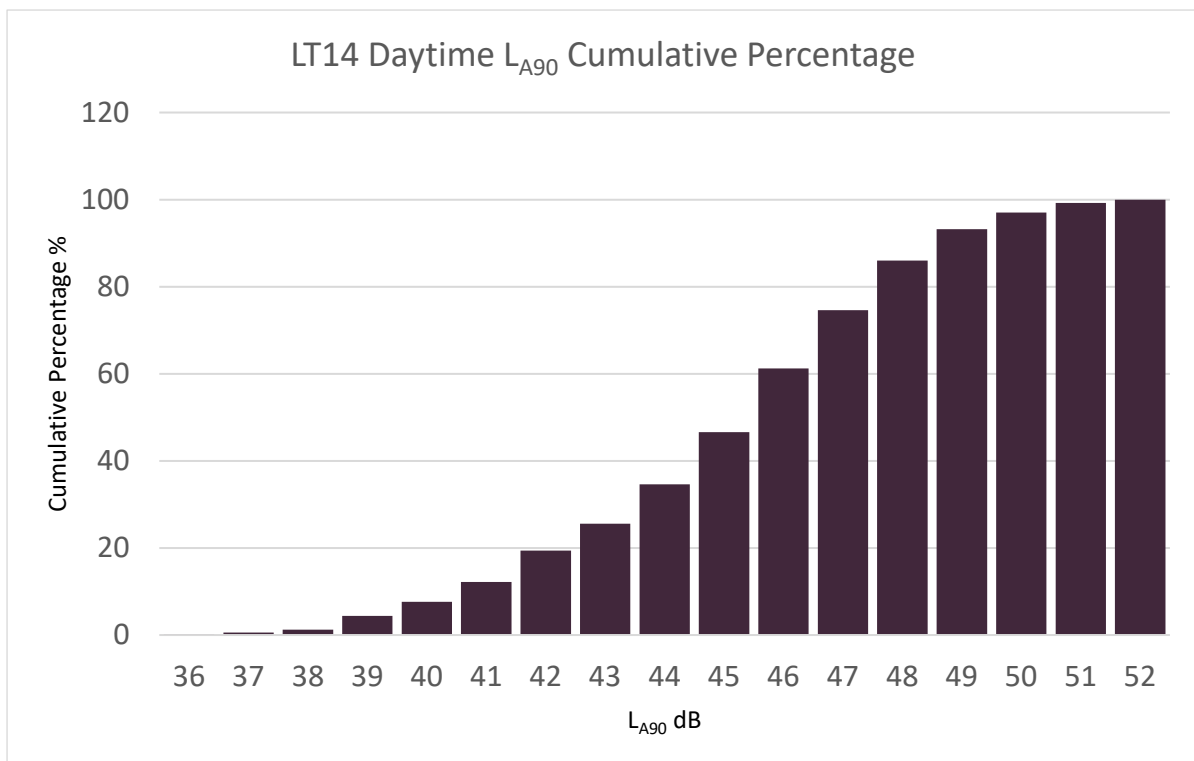
Insert 26 - LT13 Daytime Cumulative Percentage



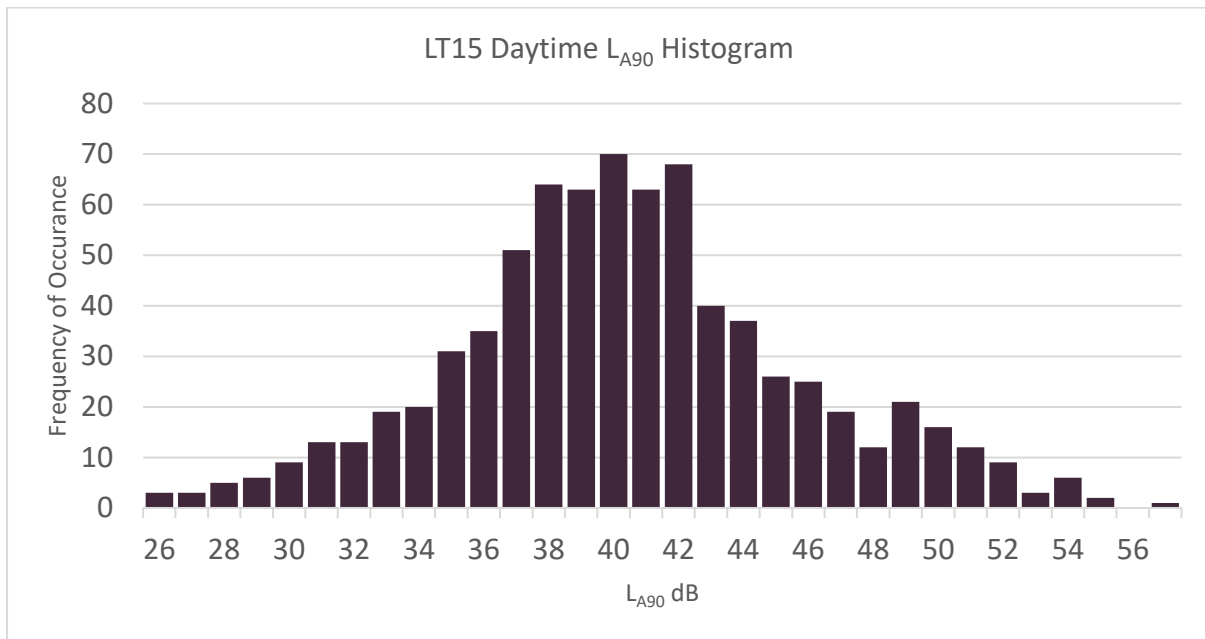
Insert 27 - LT14 Daytime Histogram



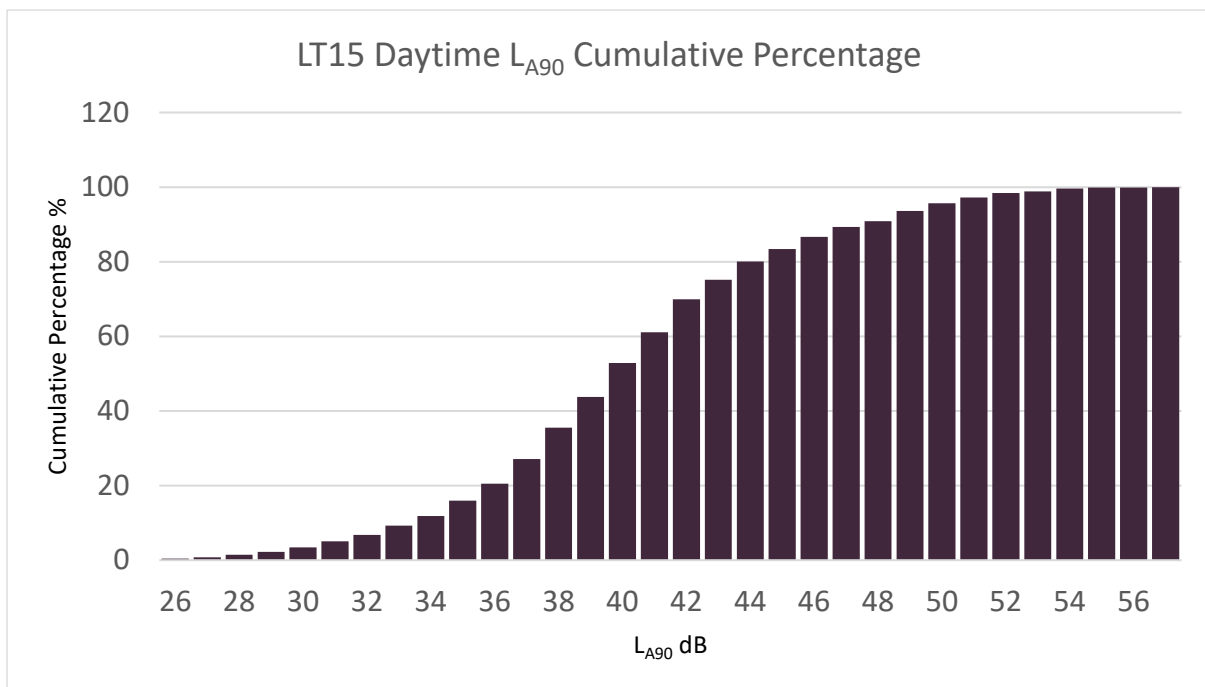
Insert 28 - LT14 Daytime Cumulative Percentage



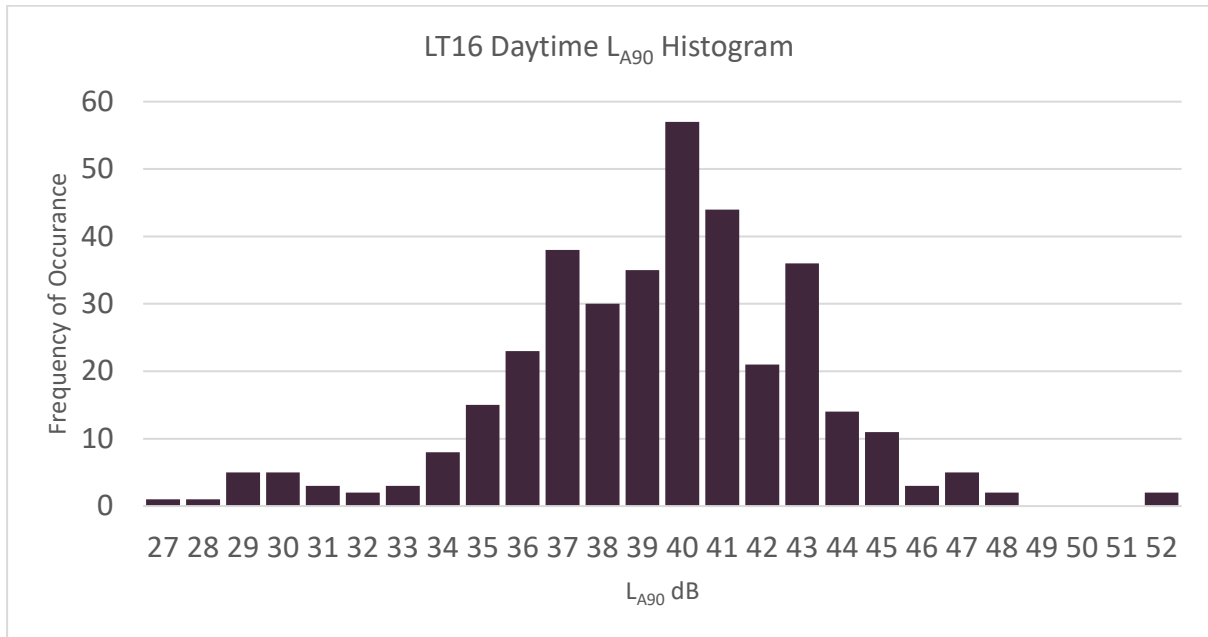
Insert 29 - LT15 Daytime Histogram



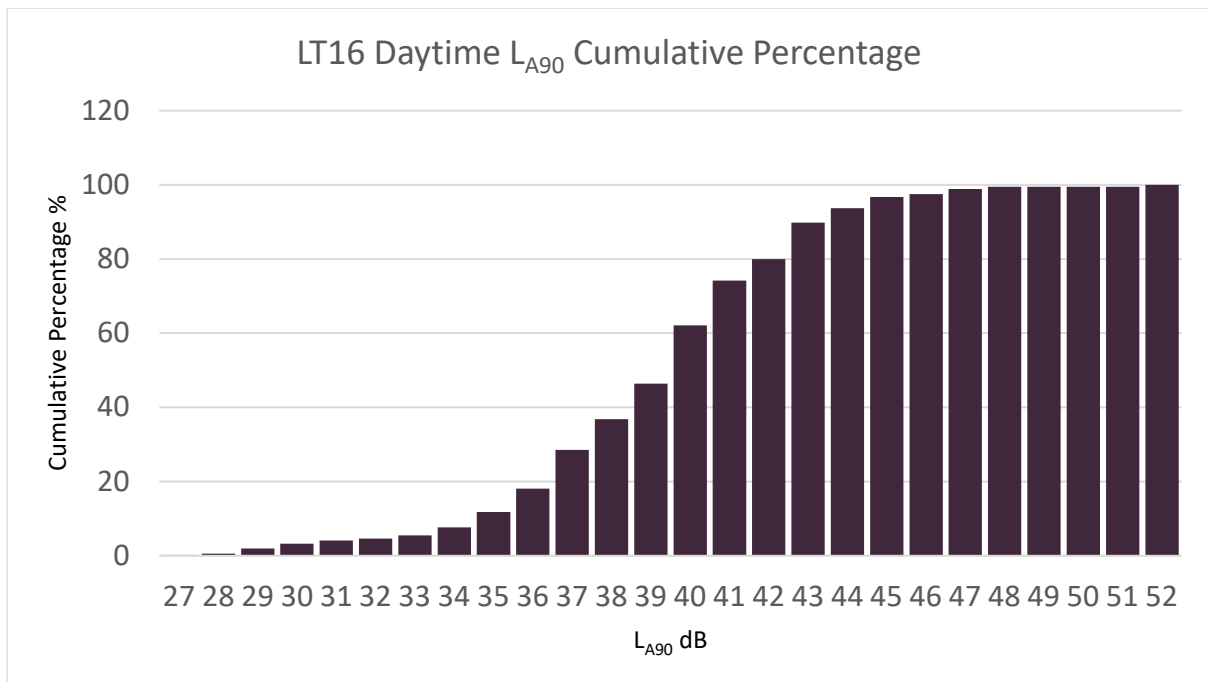
Insert 30 - LT15 Daytime Cumulative Percentage



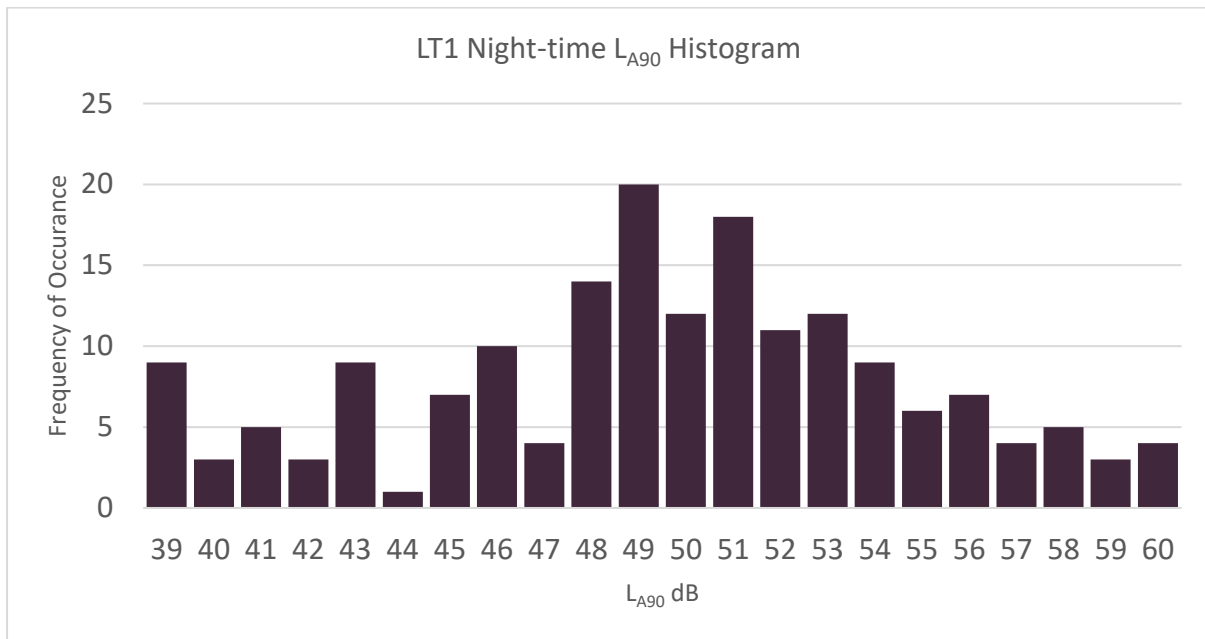
Insert 31 - LT16 Daytime Histogram



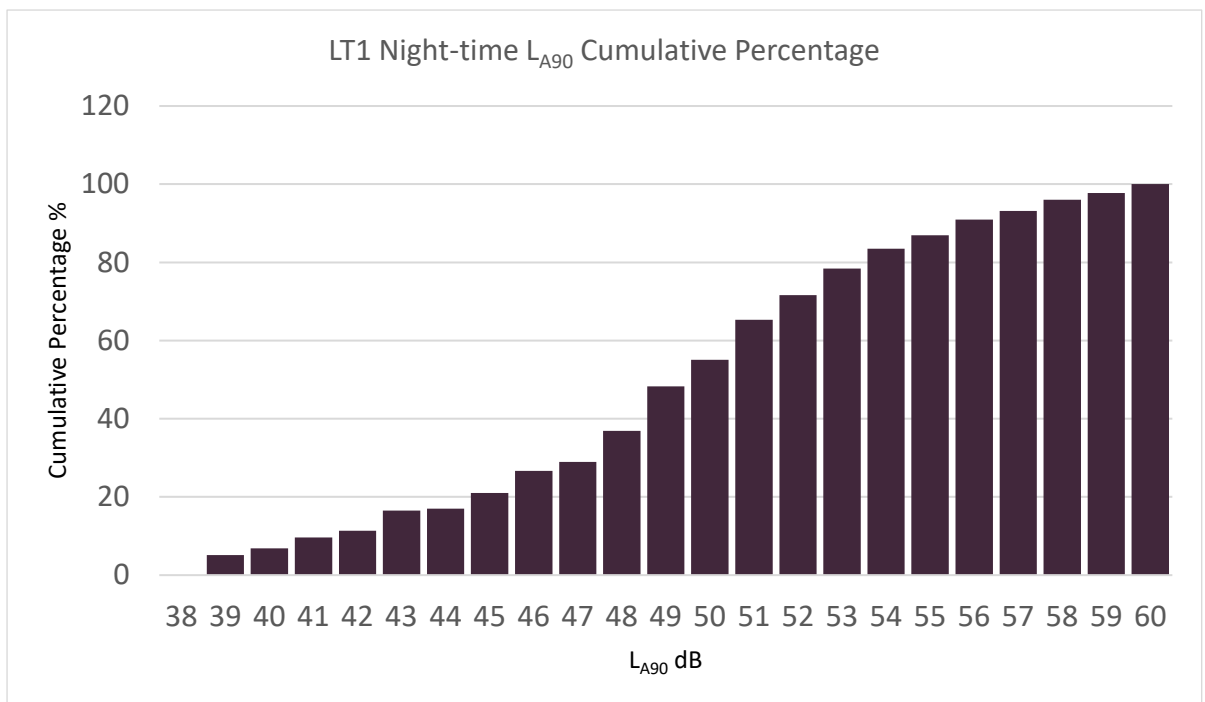
Insert 32 - LT16 Daytime Cumulative Percentage



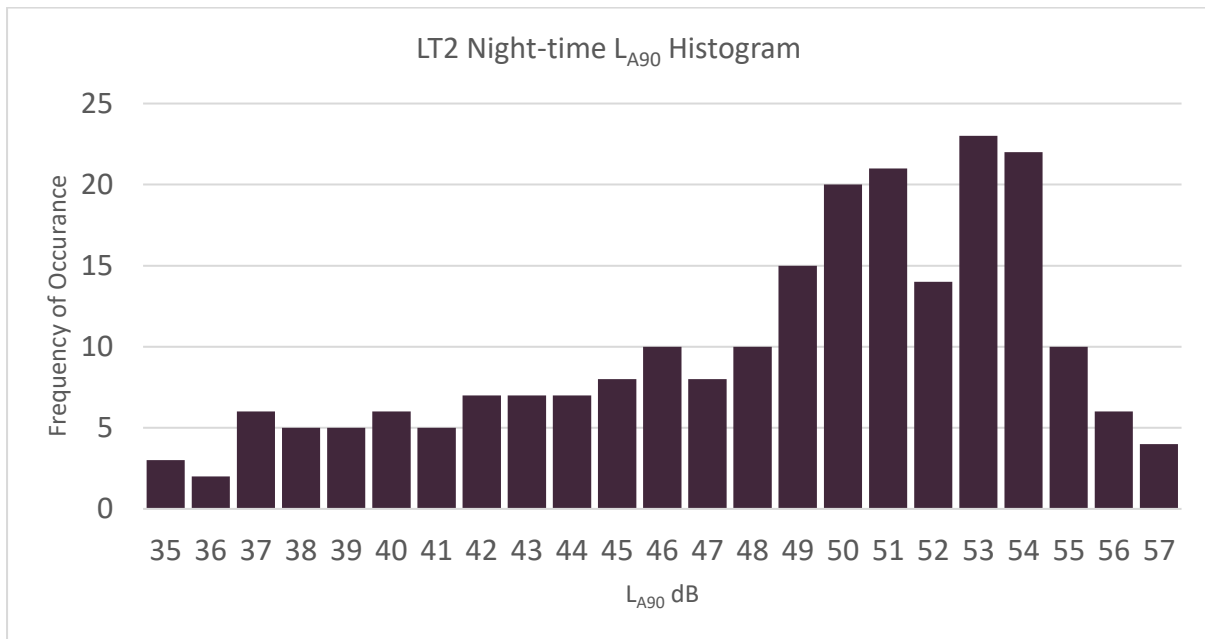
Insert 33 - LT1 Night-time Histogram



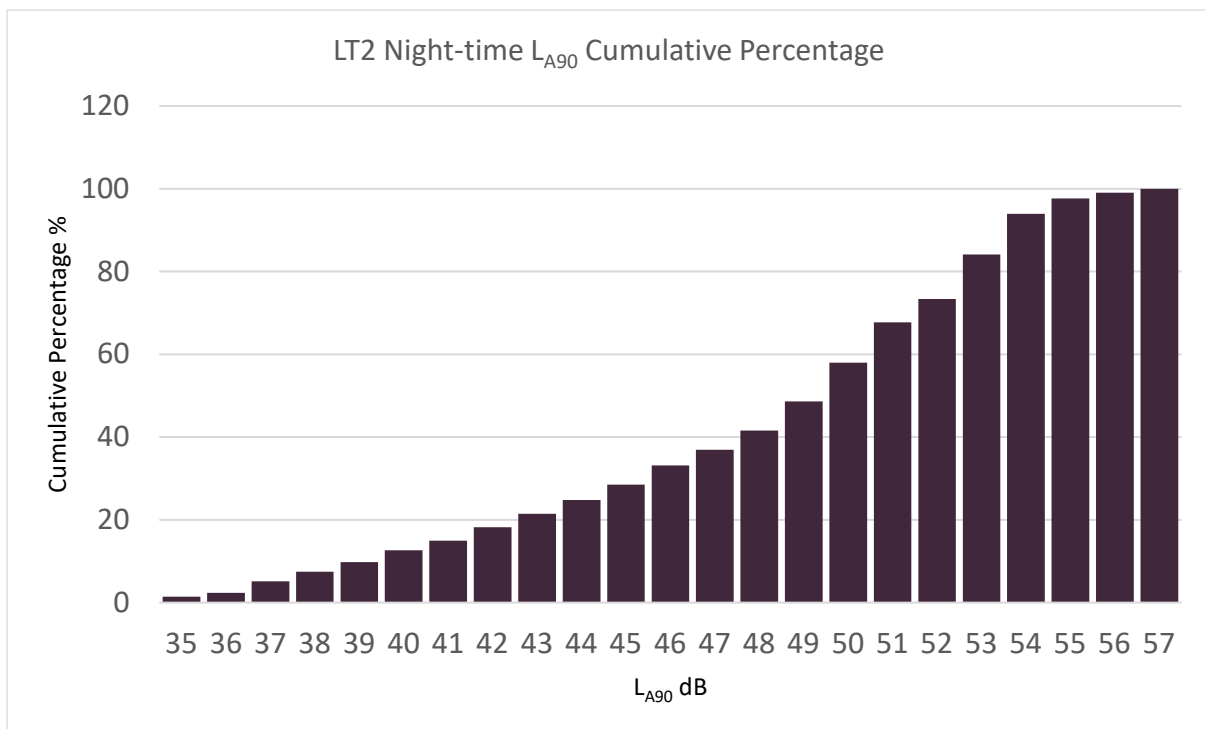
Insert 34 - LT1 Night-time Cumulative Percentage



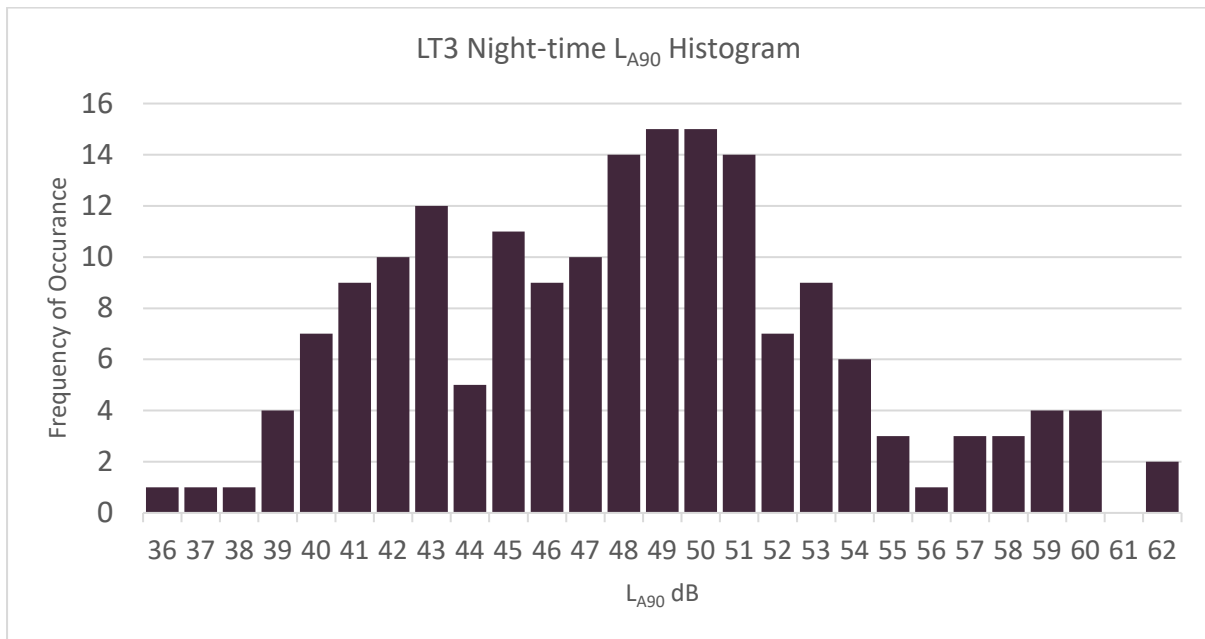
Insert 35 - LT2 Night-time Histogram



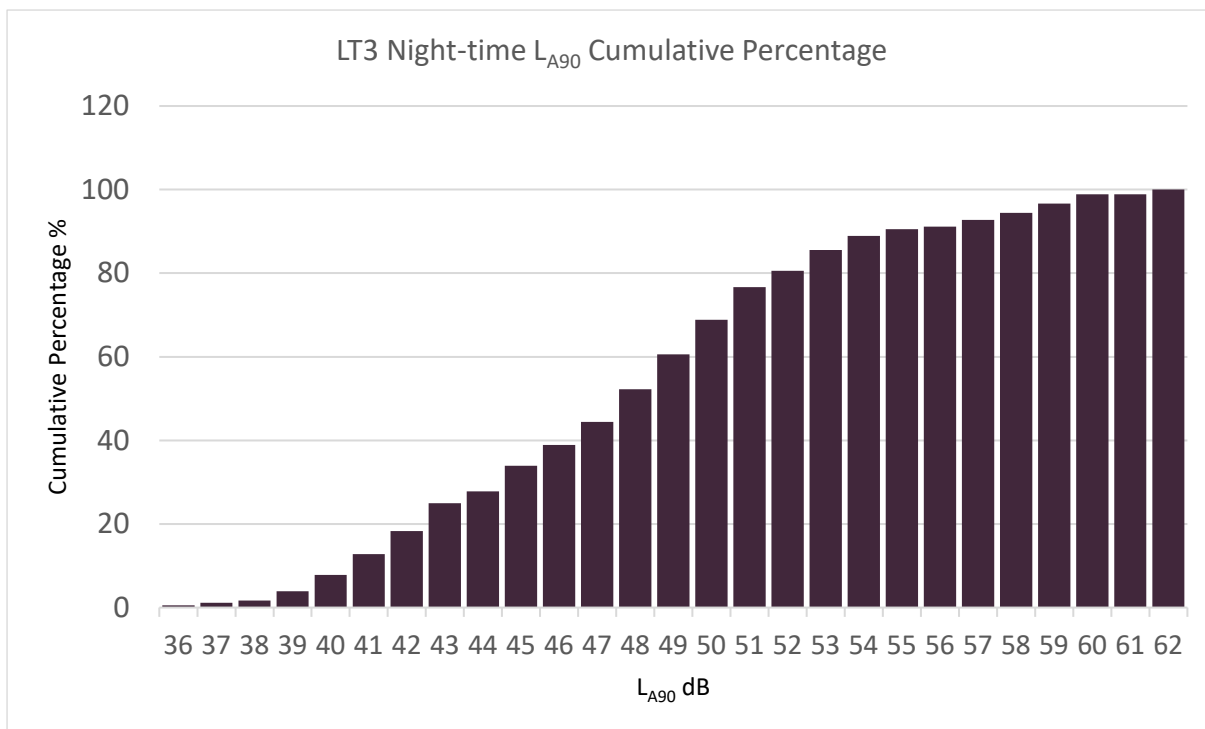
Insert 36 - LT2 Night-time Cumulative Percentage



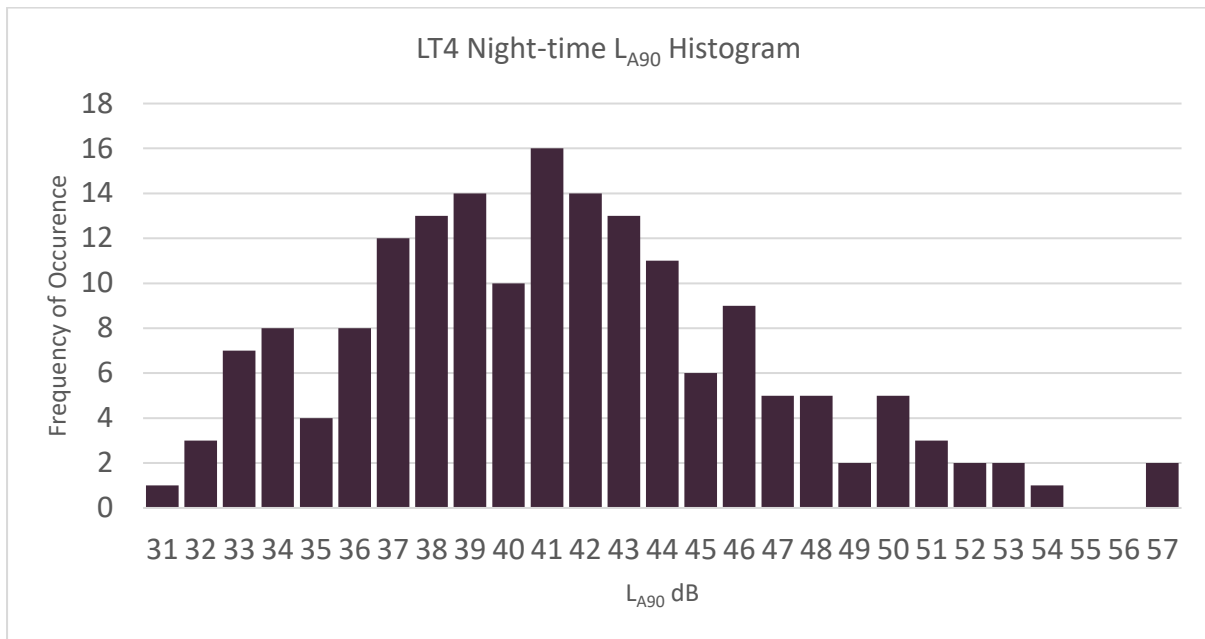
Insert 37 - LT3 Night-time Histogram



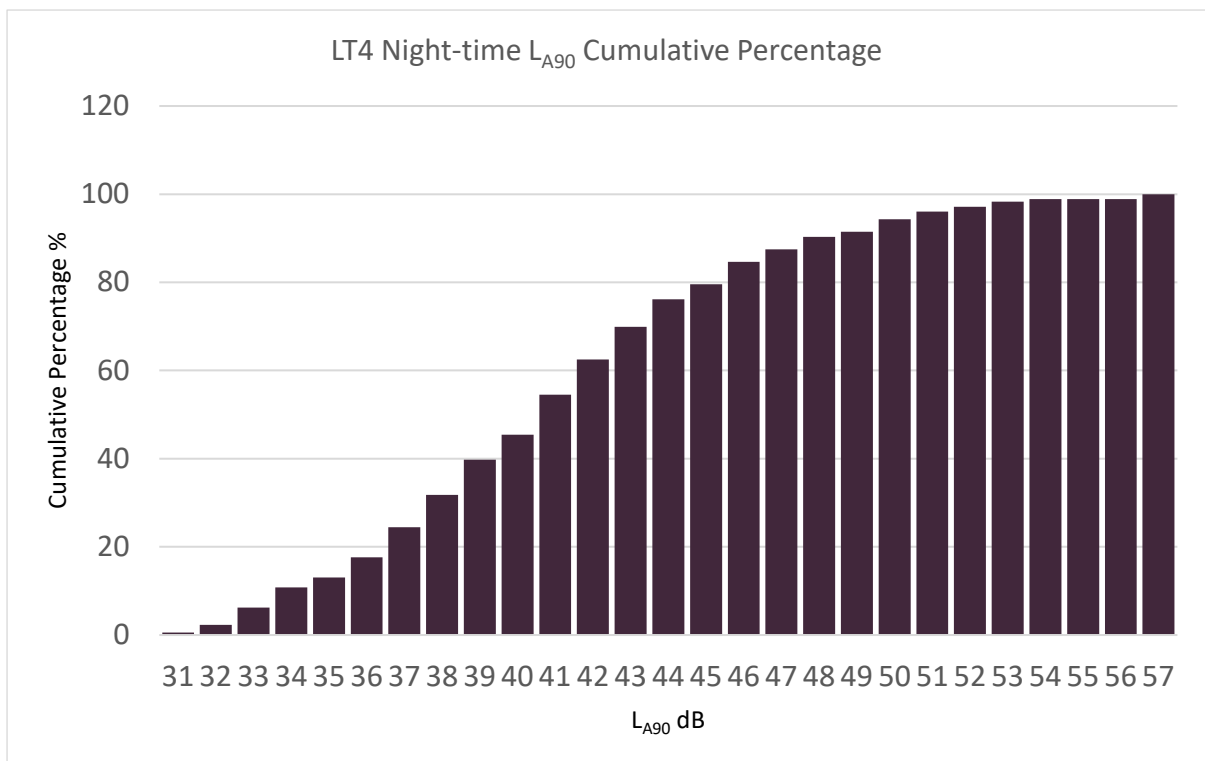
Insert 38 - LT3 Night-time Cumulative Percentage



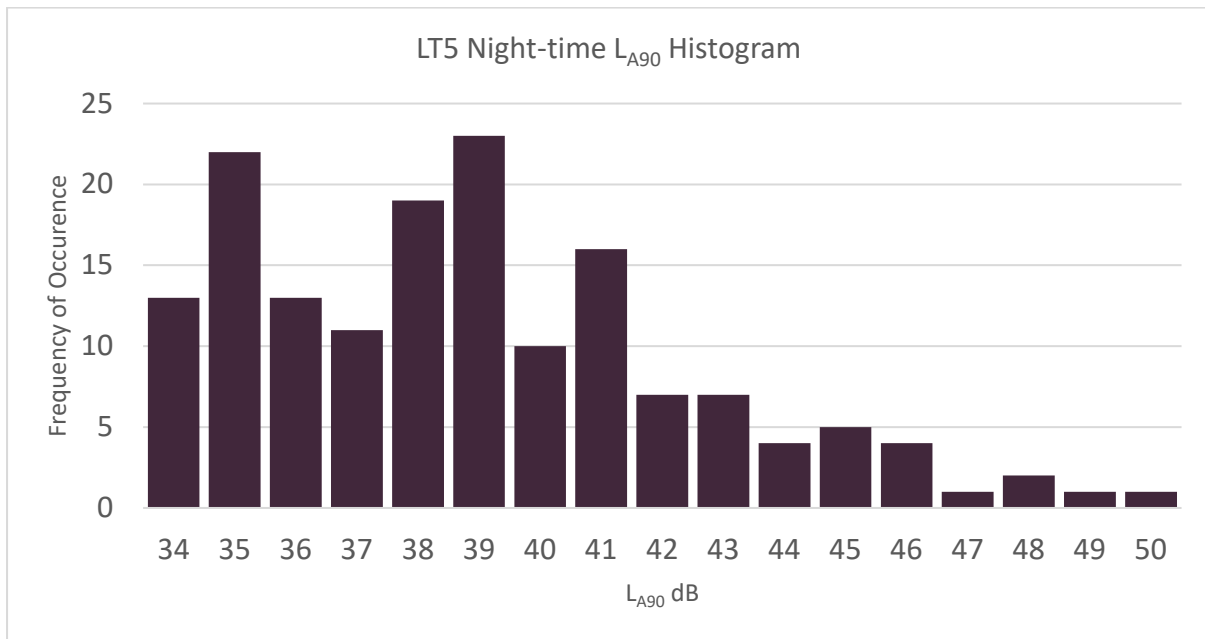
Insert 39 - LT4 Night-time Histogram



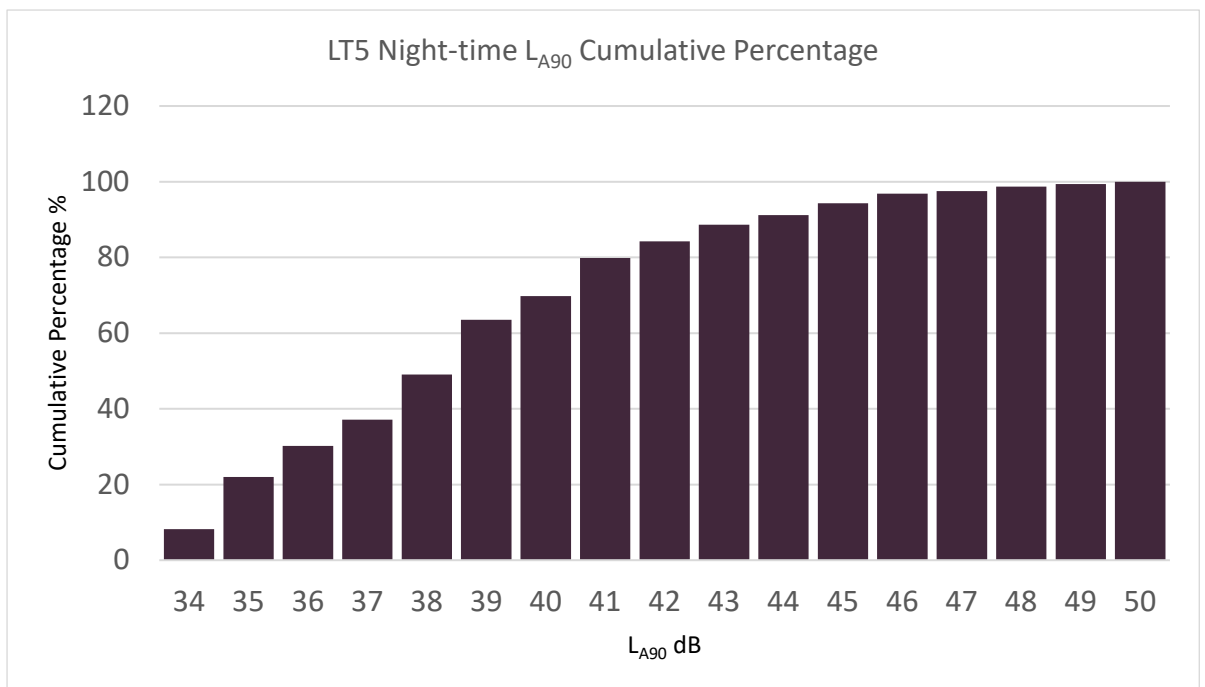
Insert 40 - LT4 Night-time Cumulative Percentage



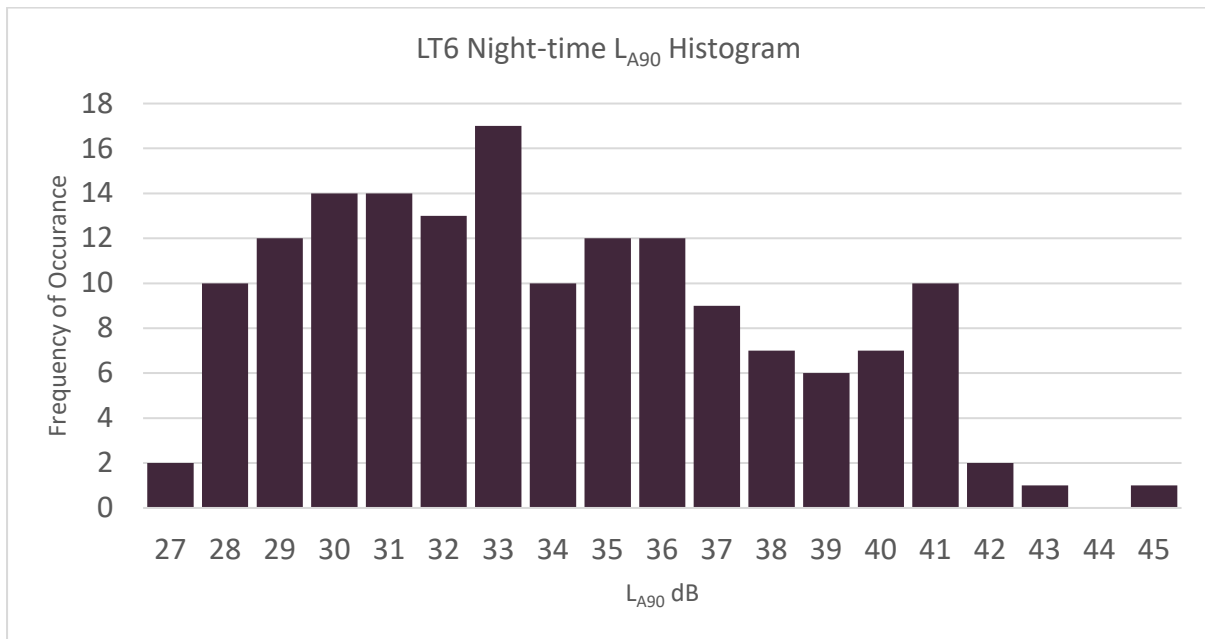
Insert 41 - LT5 Night-time Histogram



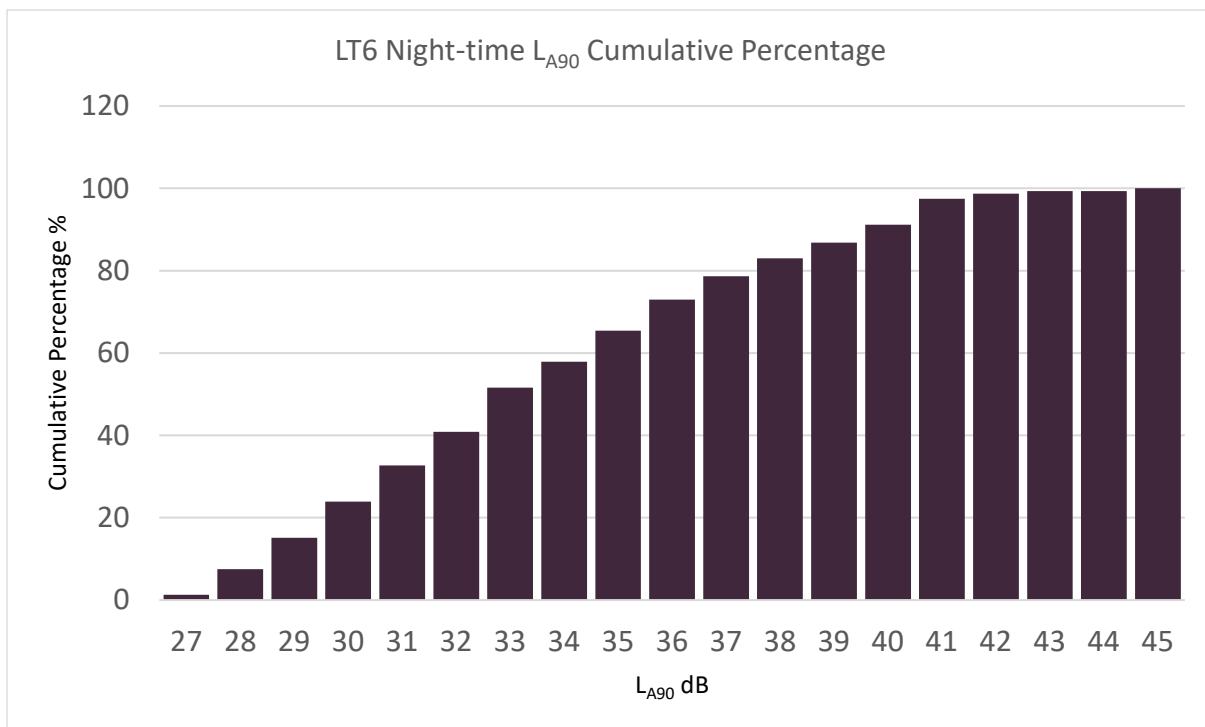
Insert 42 - LT5 Night-time Cumulative Percentage



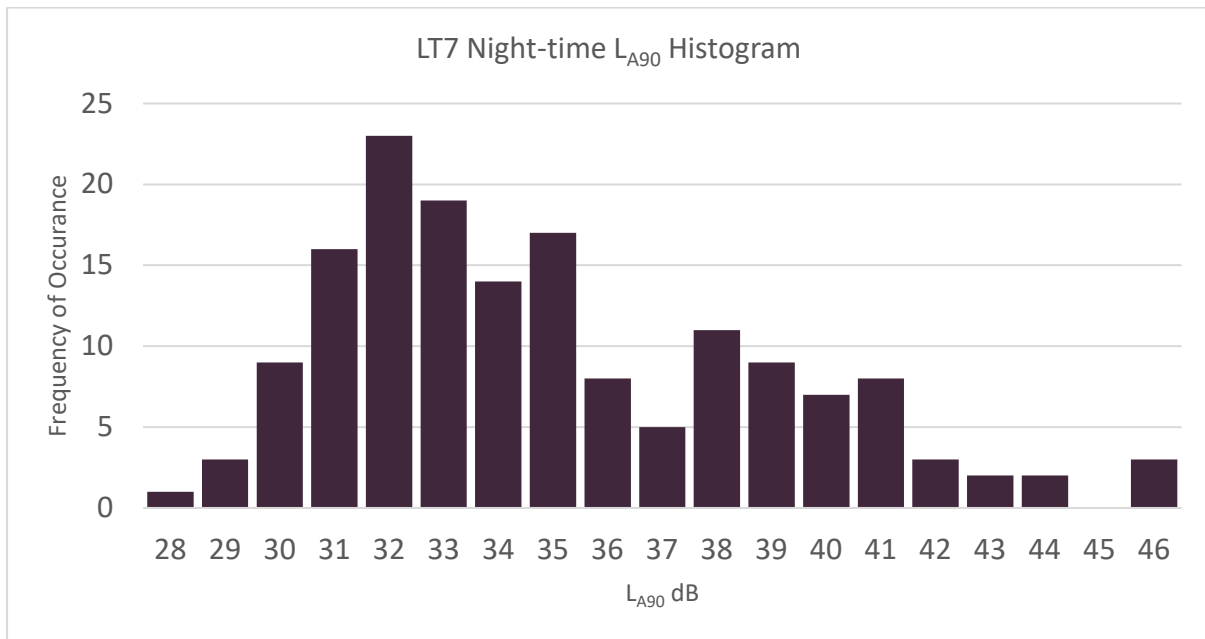
Insert 43 - LT6 Night-time Histogram



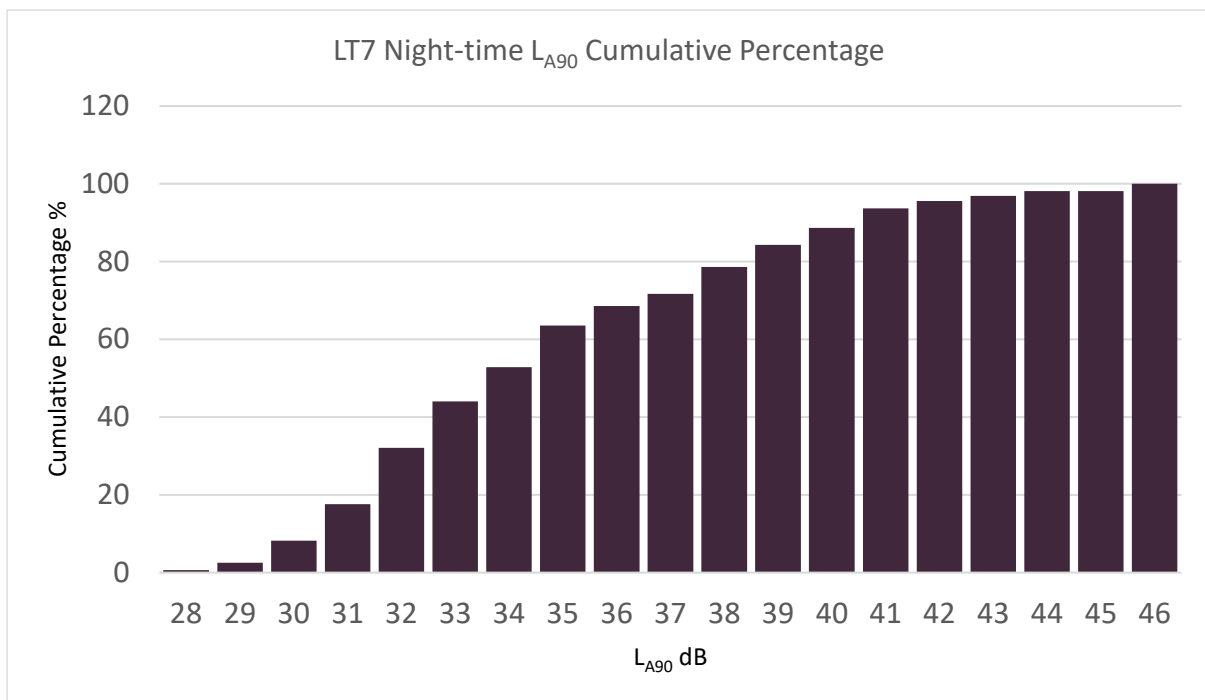
Insert 44 - LT6 Night-time Cumulative Percentage



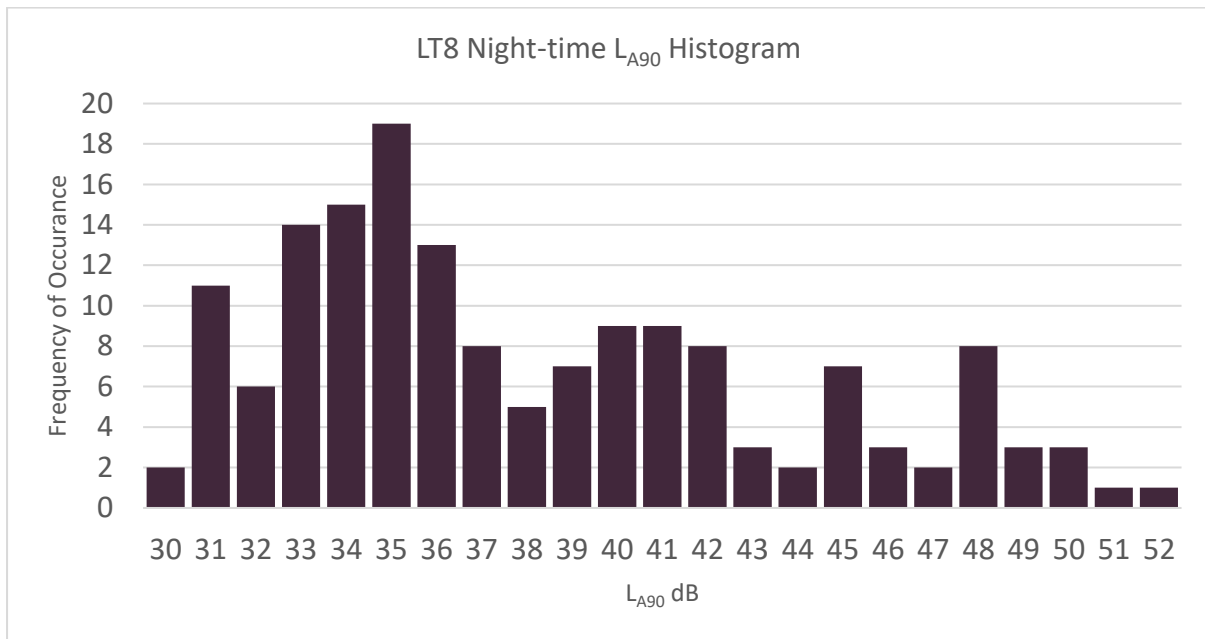
Insert 45 - LT7 Night-time Histogram



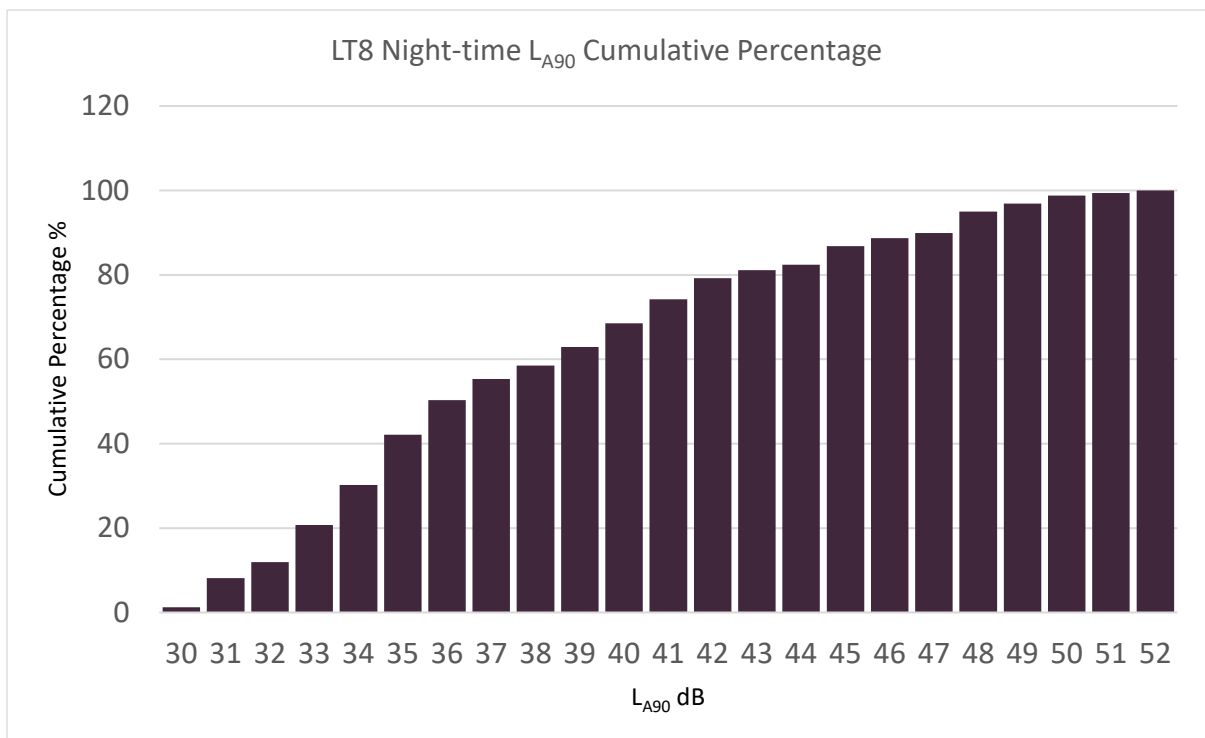
Insert 46 - LT7 Night-time Cumulative Percentage



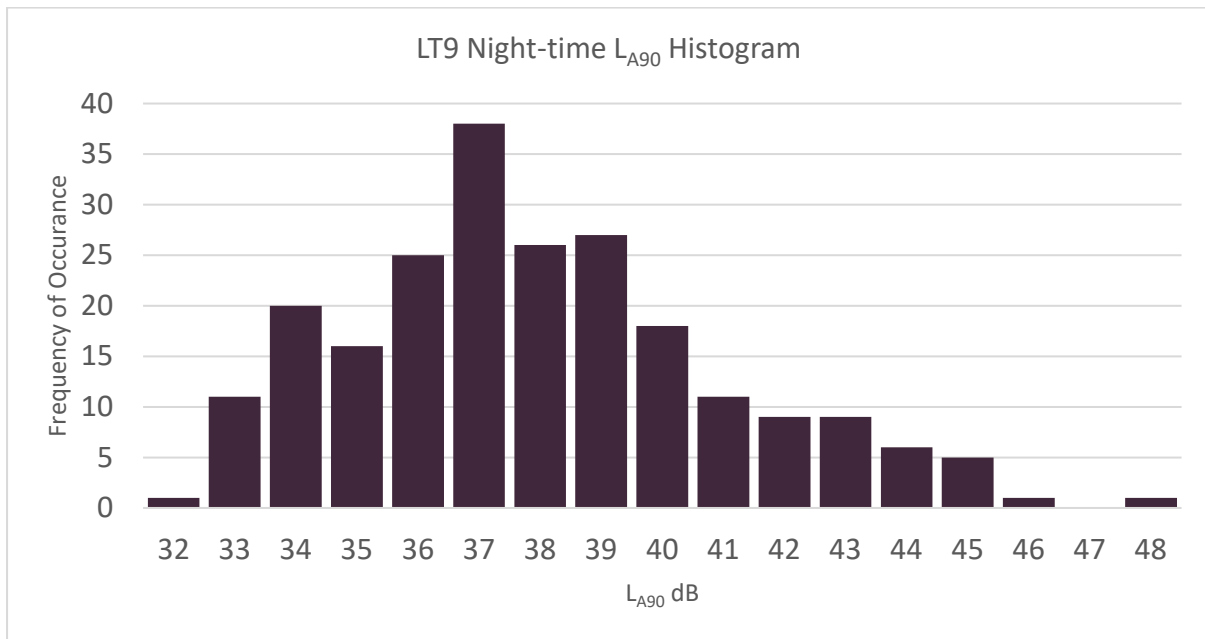
Insert 47 - LT8 Night-time Histogram



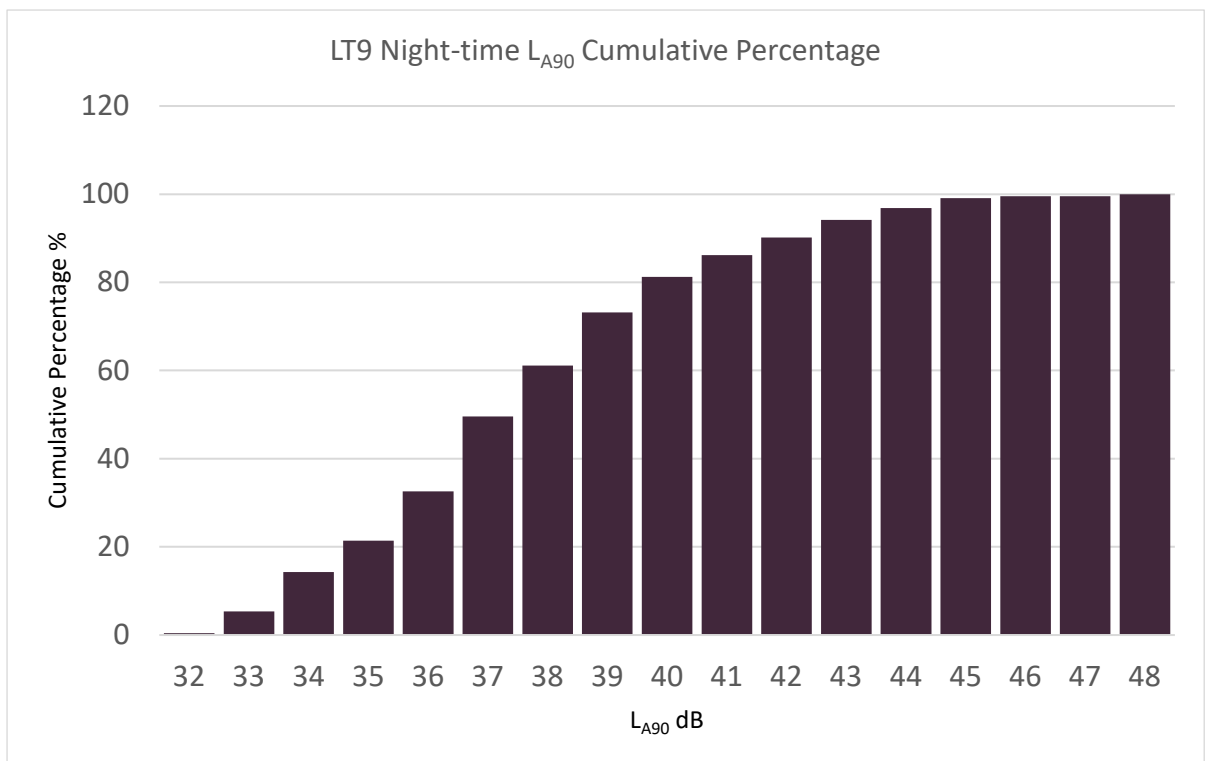
Insert 48 - LT8 Night-time Cumulative Percentage



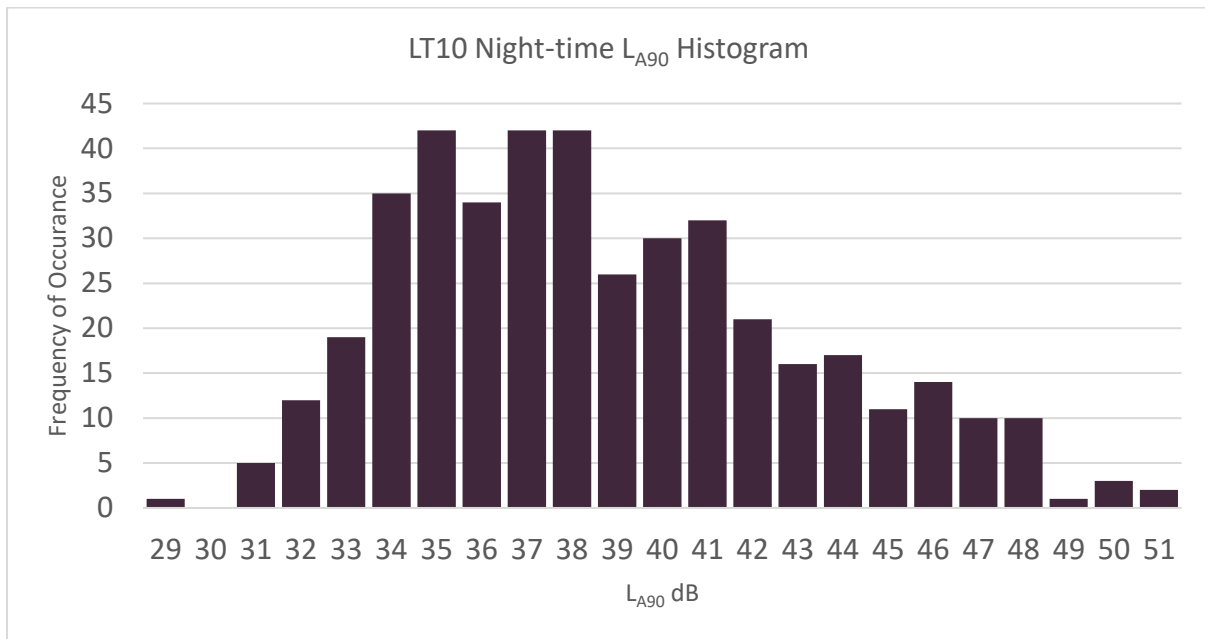
Insert 49 - LT9 Night-time Histogram



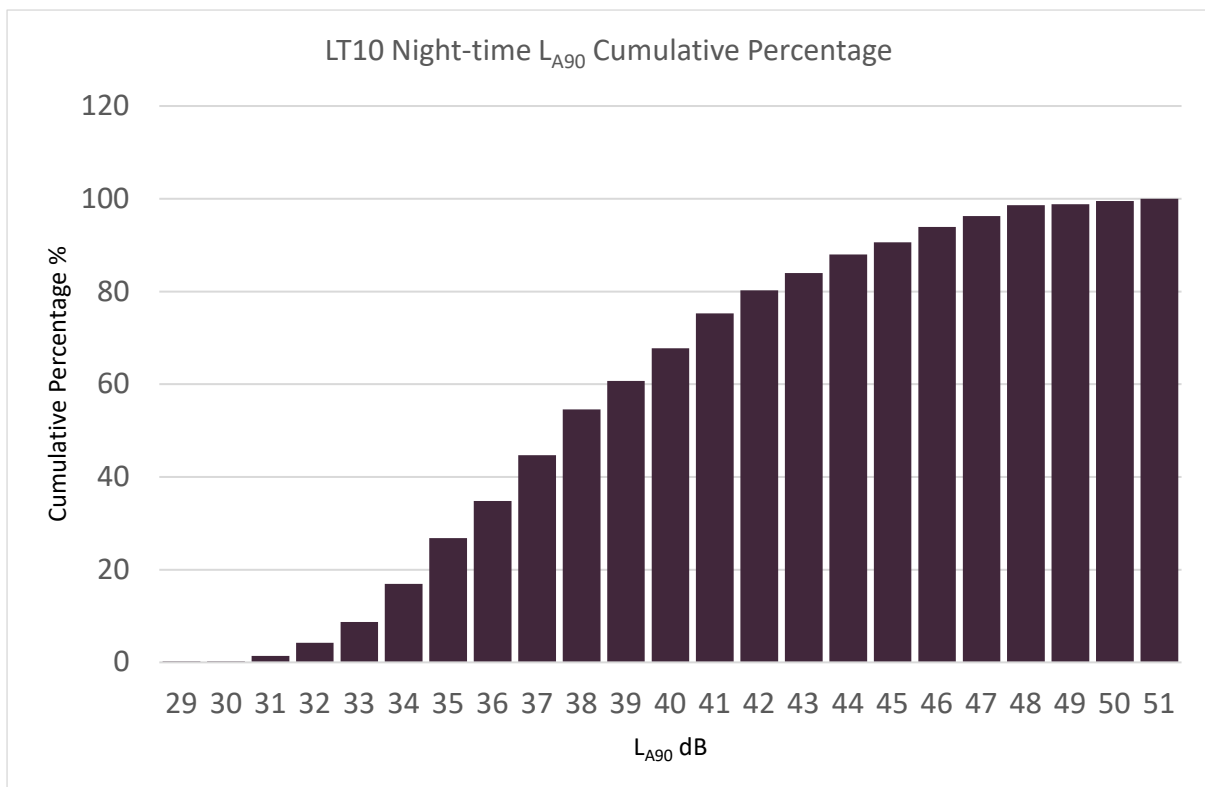
Insert 50 - LT9 Night-time Cumulative Percentage



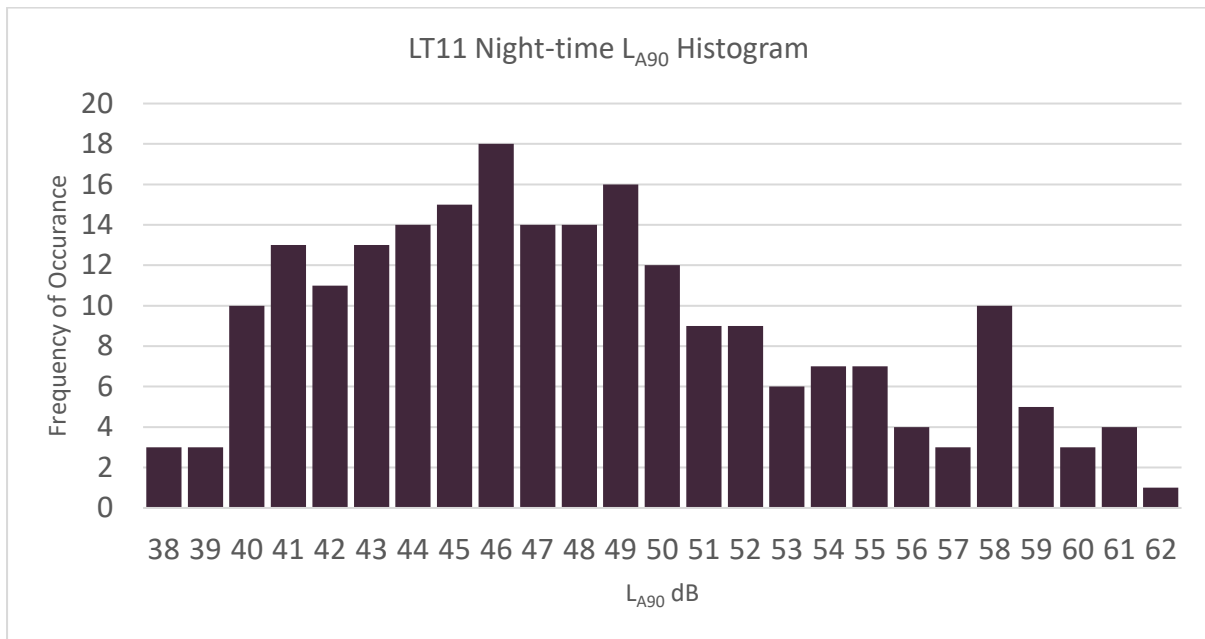
Insert 51 - LT10 Night-time Histogram



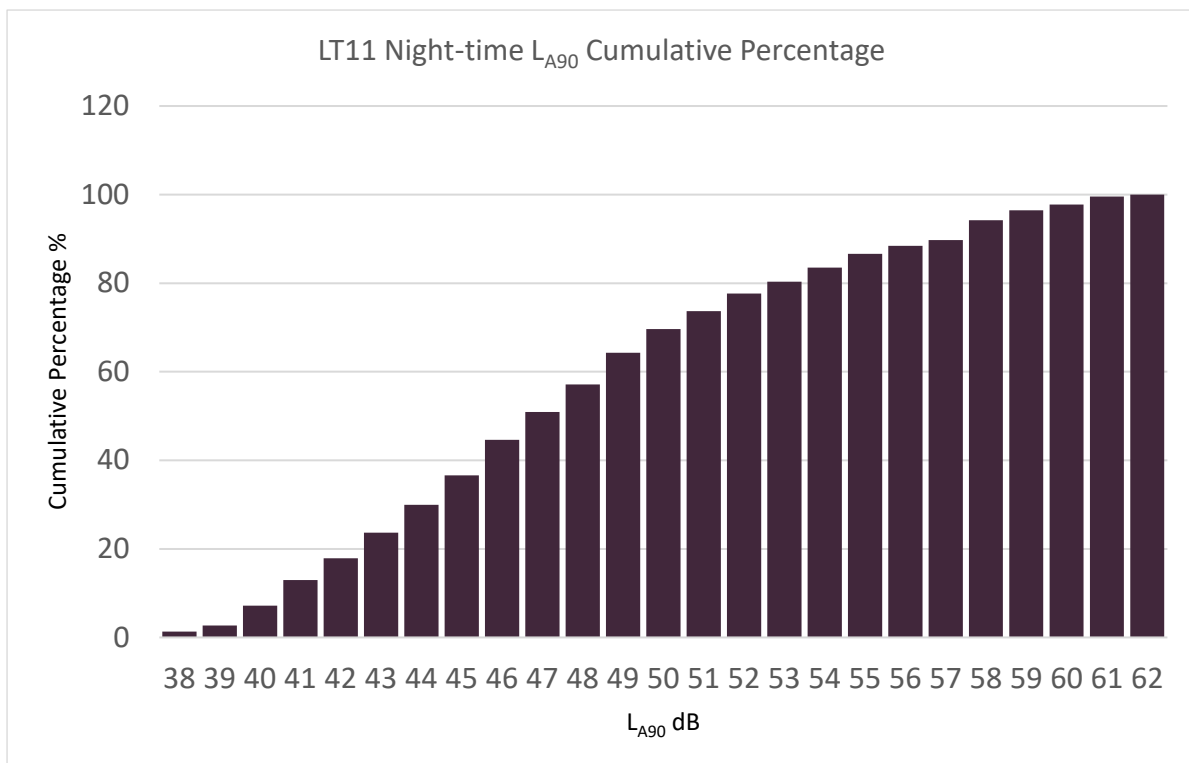
Insert 52 - LT10 Night-time Cumulative Percentage



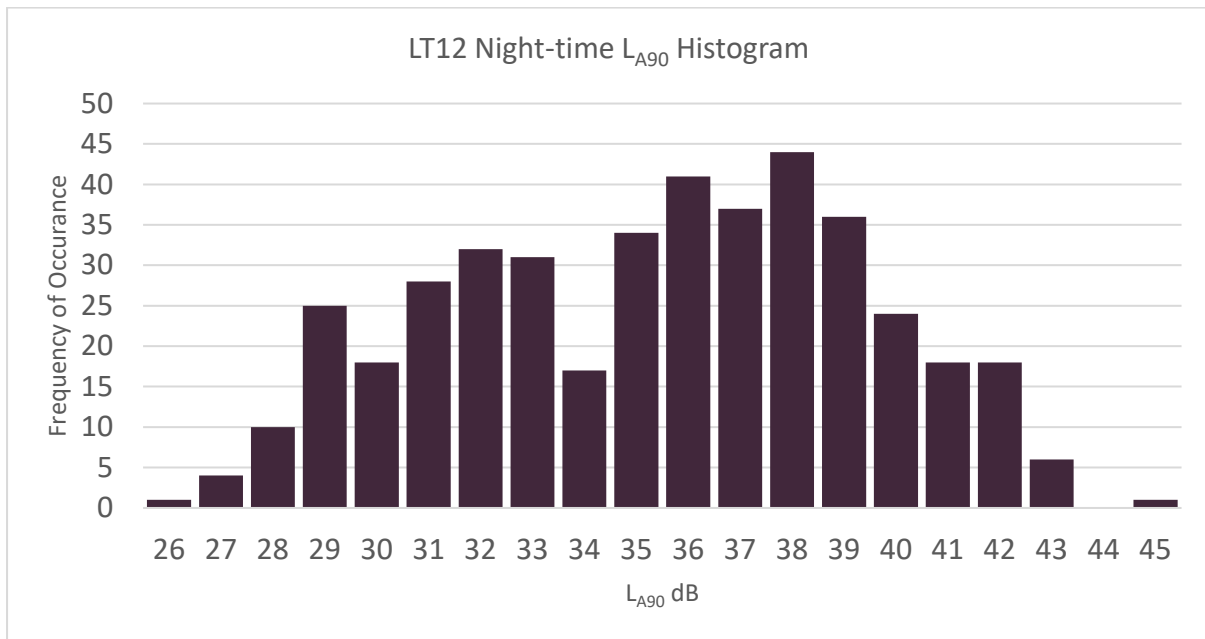
Insert 53 - LT11 Night-time Histogram



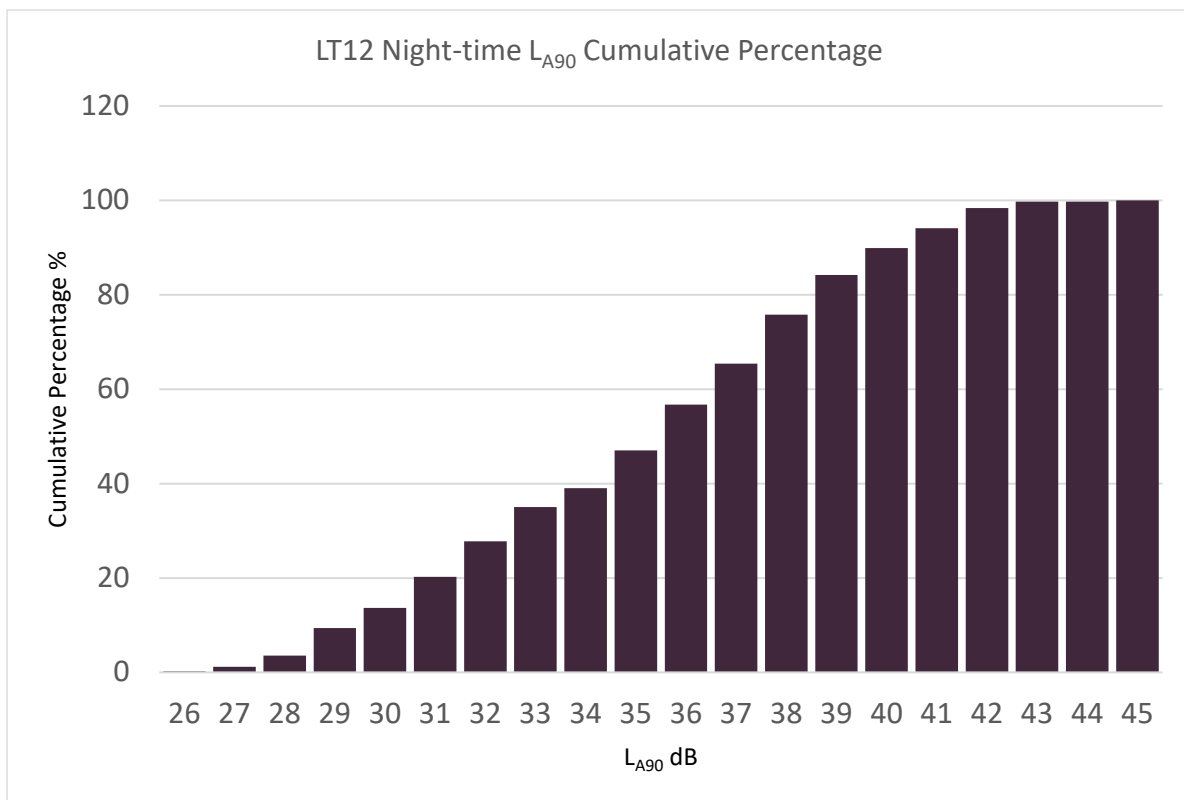
Insert 54 - LT11 Night-time Cumulative Percentage



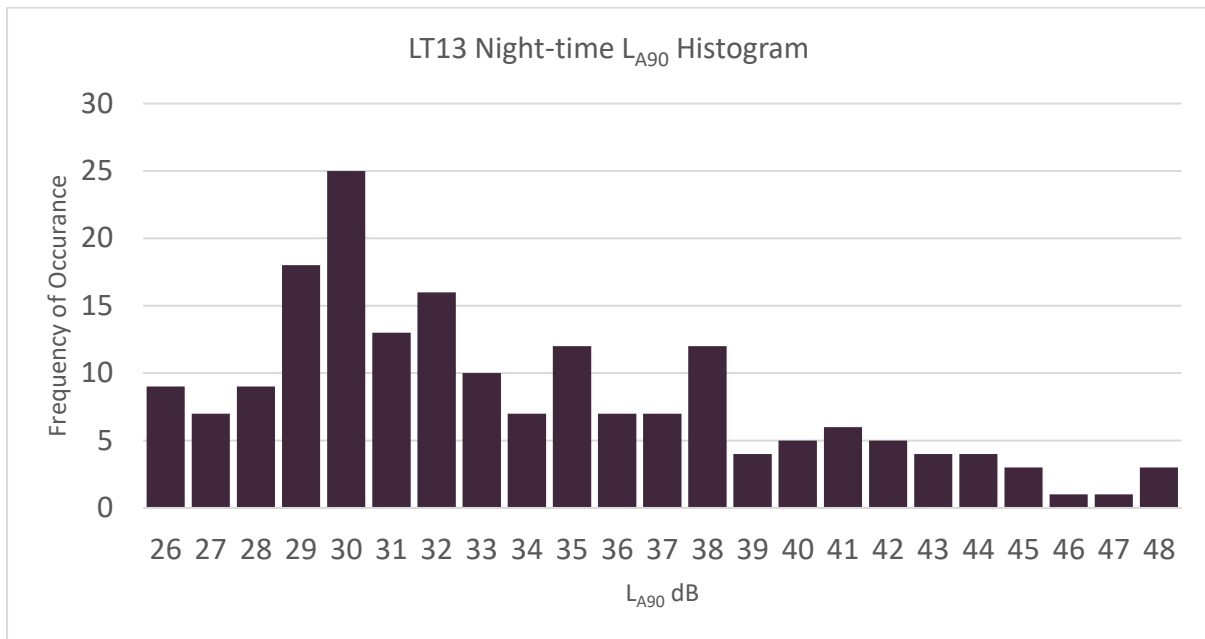
Insert 55 - LT12 Night-time Histogram



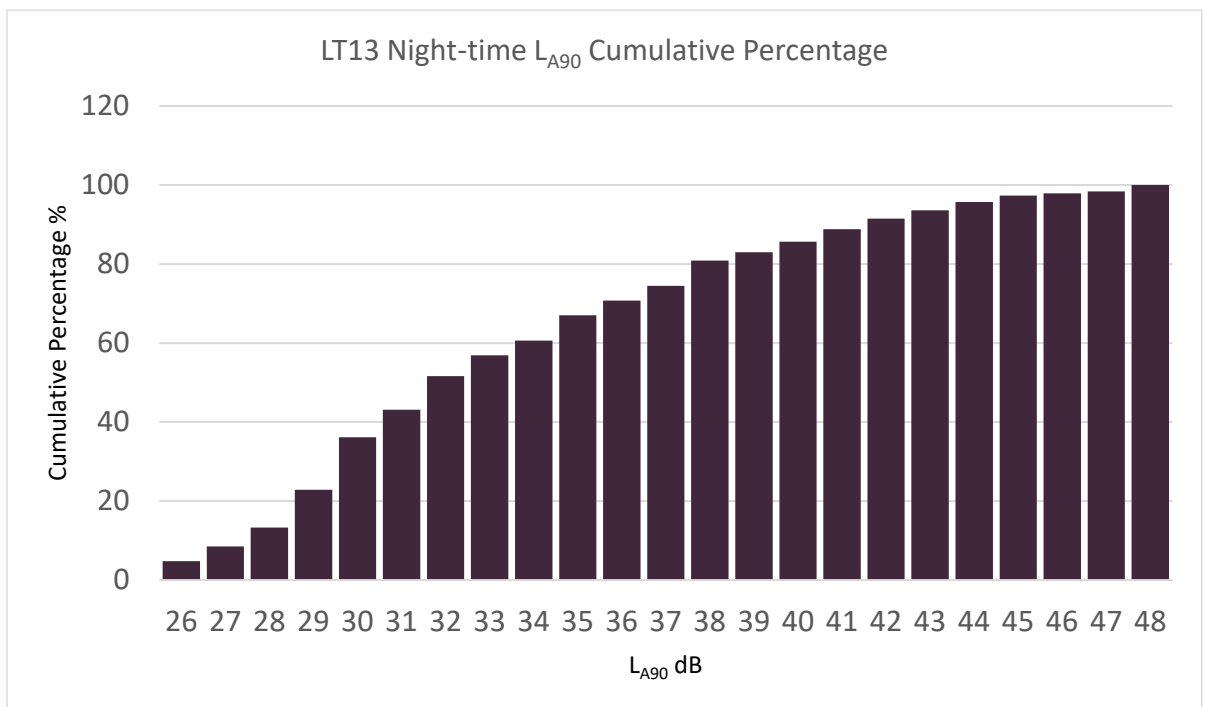
Insert 56 - LT12 Night-time Cumulative Percentage



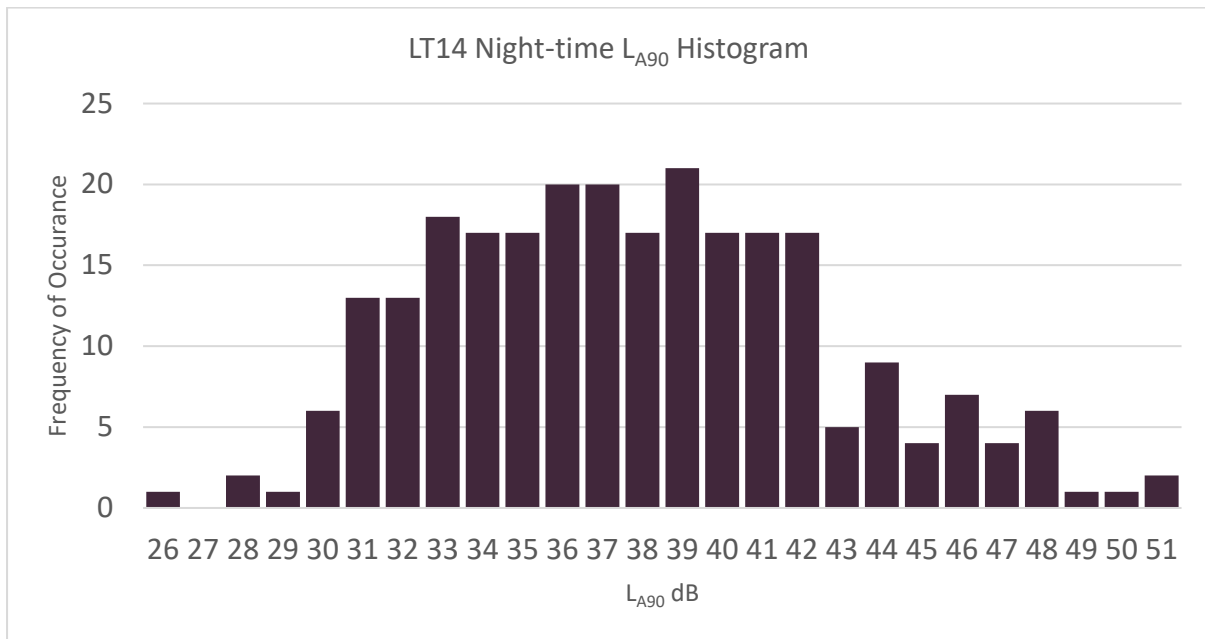
Insert 57 - LT13 Night-time Histogram



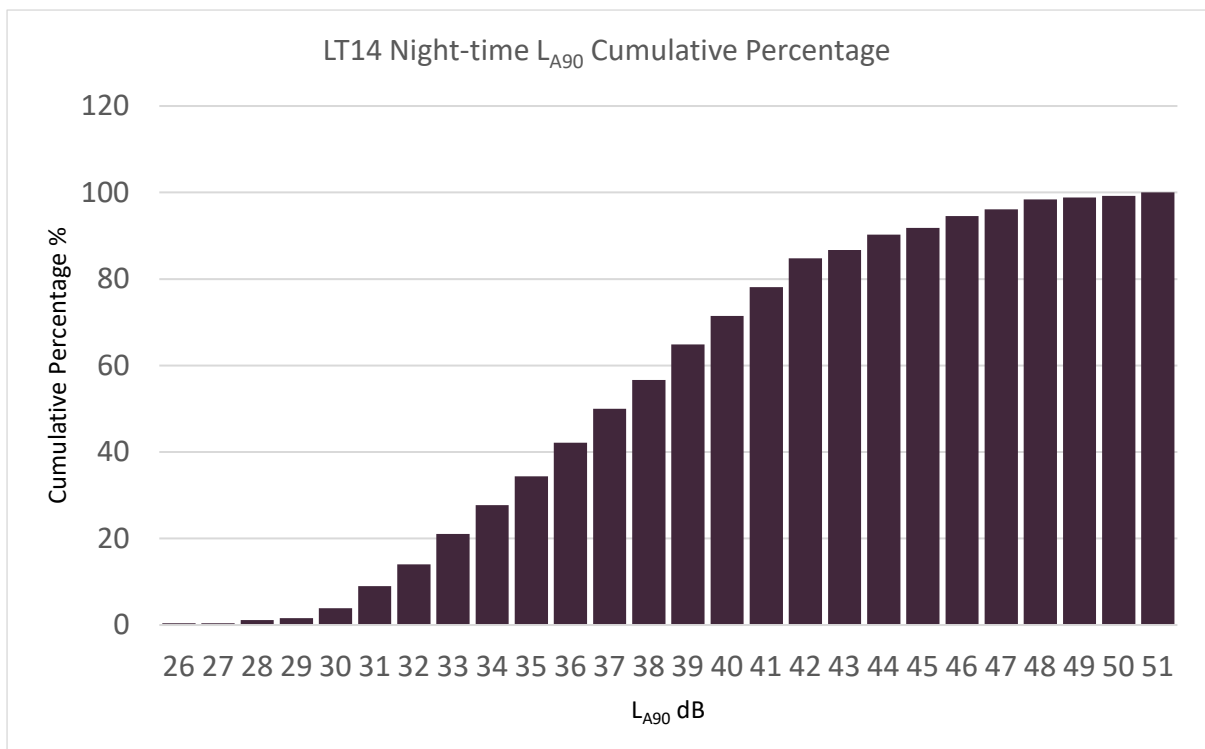
Insert 58 - LT13 Night-time Cumulative Percentage



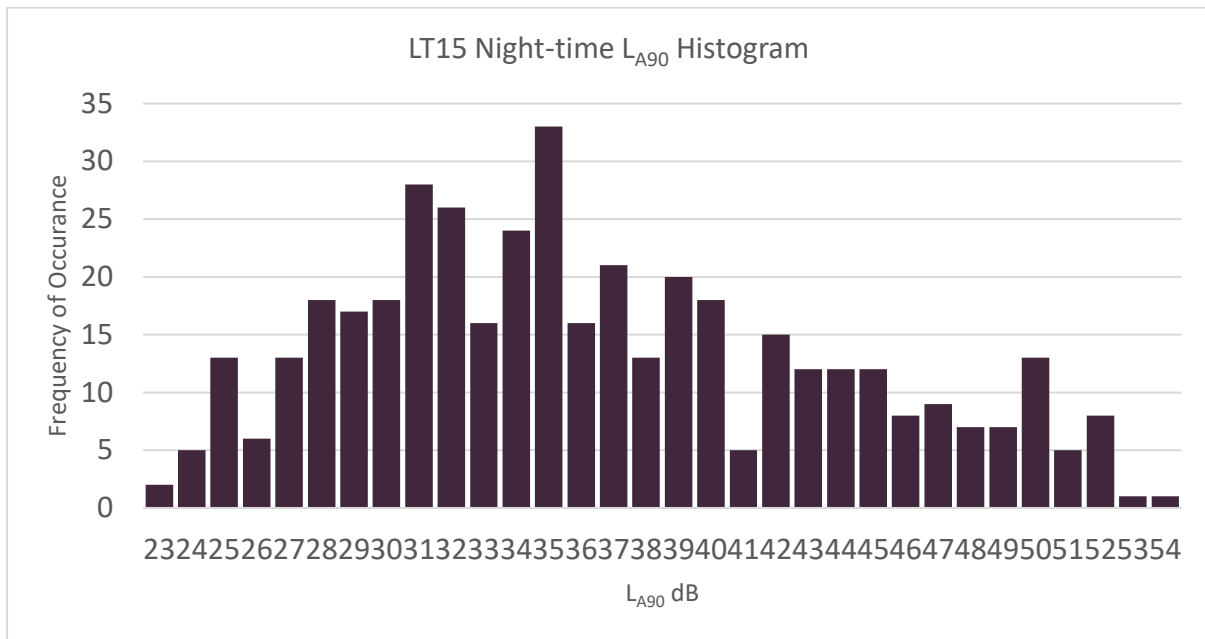
Insert 59 - LT14 Night-time Histogram



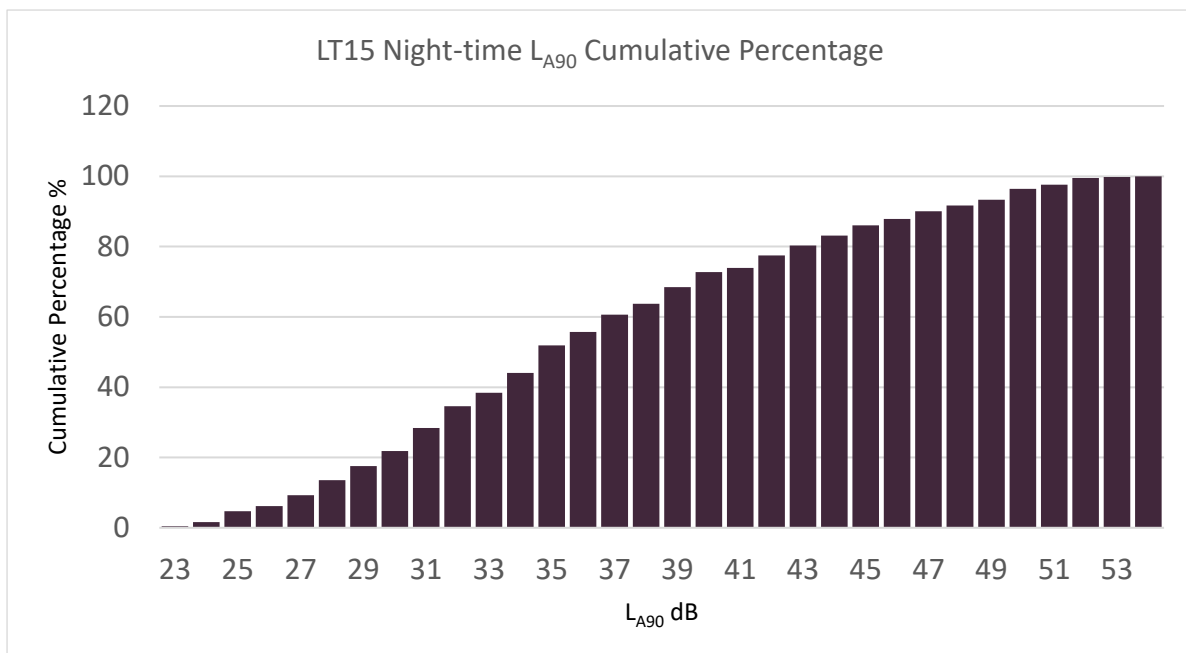
Insert 60 - LT14 Night-time Cumulative Percentage



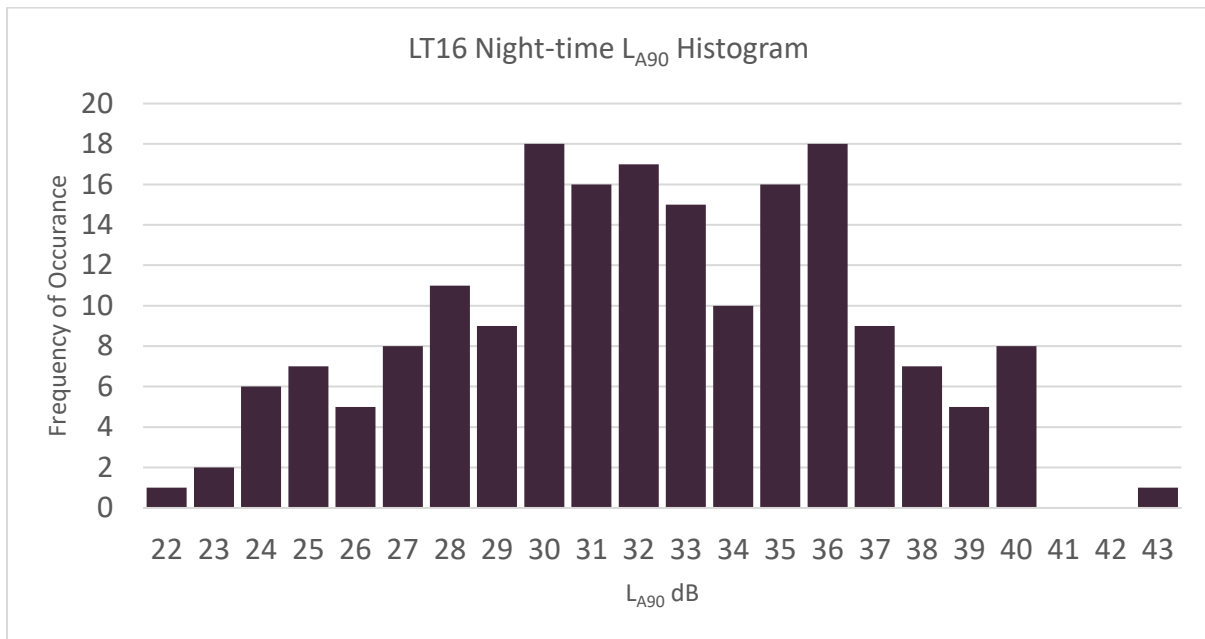
Insert 61 - LT15 Night-time Histogram



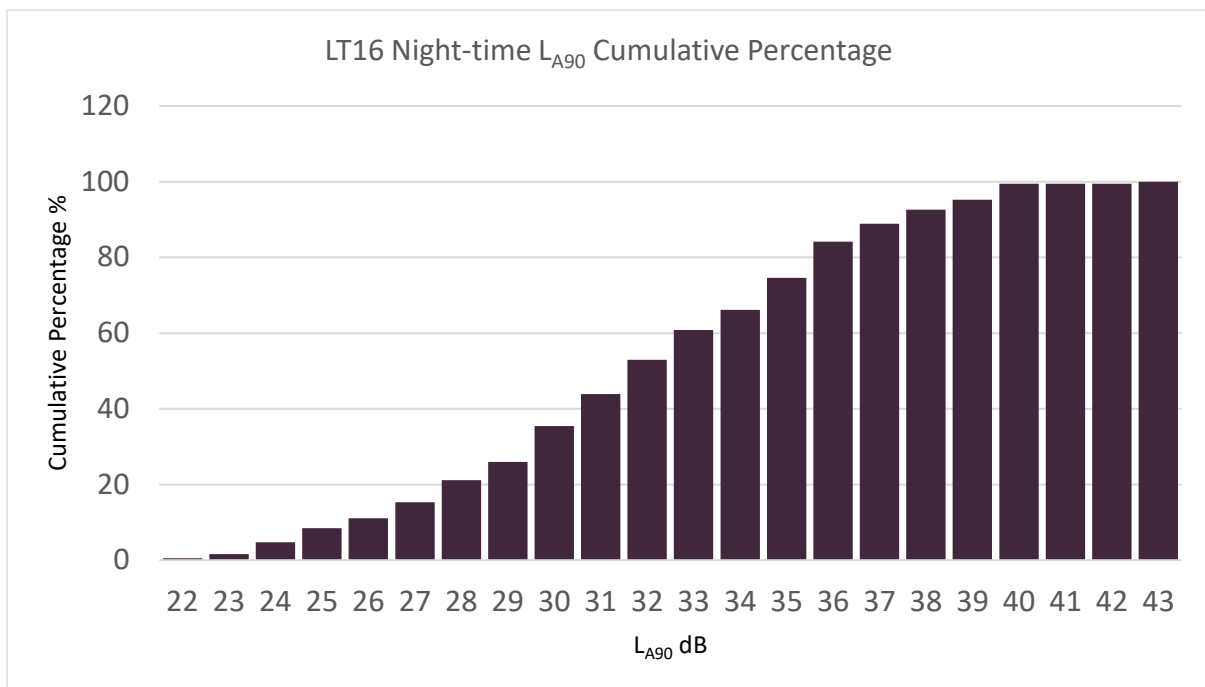
Insert 62 - LT15 Night-time Cumulative Percentage



Insert 63 - LT16 Night-time Histogram



Insert 64 - LT16 Night-time Cumulative Percentage



3. NOISE MONITORING FORMS

- 3.1.1. The following forms present the results of the noise monitoring locations. The forms show the date and time of the surveys along with a description of the audible noise whilst the surveyor was on site. The forms also present time histories of the measured noise levels and photos of the equipment setup.
- 3.1.2. The forms show periods when the data has been excluded from the analysis due to unsuitable weather conditions such as high wind speeds above 5 m/s and rain.