Certificate of conformity for area covering AFILS
In accordance with IEC 60118-4:2014, AMD1:2017

univox

Venue information

Name: _____

Room: _____

Contact: _____

Certifying Company information

Company: _____

Phone: _____

Email: _____

Name: _____

System information

Loop driver: _____ Serial No.: _____

Layout type: _____

Wire information

Wire type: _____

Wire position: _____

Resistance: Loop A: _____ Ω Loop B: _____ Ω

Test equipment

FSM used: _____

Test signals used: _____

1. Sketch

Provide a sketch or drawing of the room. Add all test points and indicate if there are any areas of the room that experience higher background noise than -32dB(A). Please provide scale or dimensions.

2. Measuring Height

Measuring height, keep consistent throughout comissioning.

Seated 1.2m		Seated and standing 1.45m	
Standing 1.7m		Other, please specify	m

3. Background Noise

Measure at least 4 points within the intended area of use. Loop system OFF, turn on all other electrical equipment and lights. -32dB is the highest background noise for immediate pass. Set Univox FSM to LOW RANGE when measuring.

Test point	A	B	C	D	E	F	G	H	I	J
dB										

Notes:

Summary	
All values are ≤32dB(A)	
Two values between -32 and -29dB(A)	
Any value ≥29dB(A)	

4. Field Strength

Using a pulsed 1 kHz test tone, Set input gain so that the AGC is active.
At least 1 test point should reach 0dB using the Univox FSM on HIGH RANGE/FLAT.

Test point	A	B	C	D	E	F	G	H	I	J
dB										

Notes:

Summary	
All values are 0dB ±3dB	
Two values are 0dB ±5dB	
Any value >5dB or ≤5dB	

5. Frequency Response

Using the Univox multi frequency test tone, measure each test point individually. 100Hz and 5kHz should be ±3dB from 1kHz. Maximum slope per test point is 6dB between 100Hz and 5kHz. Adjust MLC to compensate. Univox FSM set to HIGH RANGE/FLAT

Test point	A	B	C	D	E	F	G	H	I	J
100Hz										
1kHz										
5kHz										

Notes:

Summary	
100Hz and 5kHz ±3dB of 1kHz at all points	
100Hz and 5kHz ±5dB of 1kHz at some points	
Any value >5dB or ≤5dB of 1kHz	

6. Live Signals

Using live audio or the haspeech audio file, measure the live level signals with the Univox FSM set to HIGH RANGE/FLAT. Peaks should reach 0dB at at least one test point. Adjust input gain.

Test point	A	B	C	D	E	F	G	H	I	J
dB										

Notes:

Summary	
Min. 1 point between -6dB and +3dB	
Min. 1 point between -9dB and +6dB	

Using headphones with the Univox FSM, rate the audio quality. Make sure that the AGC, sometimes refered to as compression or input is active before continuing.						
Does the amplifier show an active input?	Yes		No			
Background noise, level of hum or hissing noise	Quiet		Noticible		Noisy	
Unpleasant audio, popping or crackling noise	Clean		Noticible		Distorted	
Signal clarity, is audio clear, muffled or shrill?	Clear		Noticible		Unintelligble	
Is the signal delivered without LED for Peak being lit?	Yes		Some Clipping		Clipping	
With a pulsed 1.6 kHz test signal, is the Peak LED lit?	No		Yes			

Notes:

7. Spill Control

Using a pulsed 1kHz signal, measure spill from the induction loop outside, above or below the covered area to verify that signal levels are sufficiently low as to not interfere with other loops. Values should be ≤32dB. Spill is measured with FSM set to HIGH RANGE/FLAT.

Test point	K	L	M	N
dB				

Notes:

8. System Noise

With the loop amplifier turned on and inputs muted, Measure background noise with the Univox FSM set to LOW RANGE. Measure at least one position. Is the noise noticably higher? Value should be ≤47dBA or ±3dB from background noise measurement result.

Test point	A	B	C	D	E	F	G	H	I	J
dB										

Notes:

Summary	
≤47dBA or within 3dB(A) of background noise	
≤32dB(A) and >3dB(A) of background noise	
≥32dB(A) and >3dB(A) of background noise	

9. Venue Accessibility

In order to assure that the system provides a good signal and will continue to do so in the future, please answer the following questions and provide the system operator the neccessary training to allow them to maintain the system adequatly for years to come.

Is the international Hearing Loop sign mounted and clearly visible?	Yes	
	No	
Is the sign placed in a suitable position that clearly shows where the system can be used?	Yes	
	No	
If applicable. If the system only provides part coverage, is there map showing where? Either online or in the venue.	Yes	
	No	
Do staff responsible for the loop know how to operate the induction loop system?	Yes	
	No	
Is there a schedule for routine inspection and maintenance?	Yes	
	No	

Notes:

Overall verdict

Is the system performing to standard IEC 60118-4? Count all colored checkboxes.

Pass		Qualified Pass		Fail	
(All checks in green boxes)		(Up to 2 checks in yellow boxes)		(1 or more checks in red boxes)	

Notes:

Declaration of conformity that the system has been tested against the requirements set by IEC 60118-4.	**Signed:**	**Date:**