

**CCAUV.A-K3, COOMET.AUV.A-K3, EUROMET.AUV.A-K3, APMP.AUV.A-K3.1, and APMP.AUV.A-K3**  
**Key comparison CCAUV.A-K3**

**MEASURAND :** Pressure sensitivity level of laboratory standard microphone type LS2P  
**FREQUENCY :** 31.5 Hz to 31.5 kHz

$x_i$ : result of measurements carried out by laboratory  $i$  (unit is dB re 1 V/Pa)  
 Results from LNE have been corrected for nominal frequencies as described in section 3.2 of the Final Report.

$u_i$ : combined standard uncertainty of  $x_i$

**Microphone:** **1395456**

Frequency Lab $i$ ↓	31.5 Hz		63 Hz		125 Hz		250 Hz		500 Hz		1000 Hz		2000 Hz		4000 Hz	
	$x_i$ / dB	$2u_i$ / dB														
CENAM	-38.35	0.05	-38.38	0.05	-38.40	0.06	-38.43	0.06	-38.45	0.06	-38.46	0.06	-38.44	0.06	-38.32	0.06
DPLA	-38.378	0.08	-38.408	0.04	-38.436	0.03	-38.459	0.03	-38.479	0.03	-38.489	0.03	-38.470	0.03	-38.342	0.03
GUM	-	-	-38.43	0.05	-38.45	0.05	-38.46	0.05	-38.49	0.05	-38.49	0.05	-38.47	0.05	-38.34	0.05
KRISS	-38.369	0.06	-38.393	0.04	-38.418	0.03	-38.441	0.03	-38.460	0.03	-38.471	0.03	-38.452	0.03	-38.317	0.03
LNE	-38.365	0.042	-38.387	0.034	-38.413	0.031	-38.436	0.030	-38.456	0.030	-38.468	0.031	-38.449	0.033	-38.321	0.040
NIST	-38.366	0.08	-38.399	0.06	-38.427	0.06	-38.454	0.04	-38.476	0.04	-38.488	0.04	-38.472	0.04	-38.347	0.04
NMIJ	-38.39	0.30	-38.42	0.10	-38.45	0.09	-38.47	0.09	-38.50	0.09	-38.51	0.09	-38.49	0.09	-38.36	0.09
NPL	-38.36	0.06	-38.41	0.03	-38.44	0.03	-38.46	0.03	-38.48	0.03	-38.48	0.03	-38.47	0.03	-38.34	0.03
PTB	-38.37	0.04	-38.40	0.04	-38.43	0.04	-38.45	0.04	-38.47	0.04	-38.48	0.04	-38.46	0.04	-38.33	0.04

## Key comparison CCAUV.A-K3

**MEASURAND :** Pressure sensitivity level of laboratory standard microphone type LS2P  
**FREQUENCY :** 31.5 Hz to 31.5 kHz

$x_i$ : result of measurements carried out by laboratory  $i$  (unit is dB re 1 V/Pa)  
 Results from LNE have been corrected for nominal frequencies as described in section 3.2 of the Final Report.

$u_i$ : combined standard uncertainty of  $x_i$

**Microphone:** 1395456

Frequency Lab $i$	6300 Hz		8000 Hz		10000 Hz		12500 Hz		16000 Hz		20000 Hz		25000 Hz		31500 Hz	
	$x_i$ / dB	$2u_i$ / dB														
CENAM	-38.07	0.06	-37.84	0.05	-37.56	0.05	-37.33	0.05	-37.59	0.07	-39.09	0.17	-41.77	0.21	-44.76	0.37
DPLA	-38.085	0.03	-37.851	0.03	-37.567	0.03	-37.322	0.04	-37.559	0.05	-39.050	0.08	-41.764	0.14	-44.687	0.20
GUM	-38.10	0.05	-37.86	0.06	-37.57	0.07	-37.33	0.08	-37.59	0.09	-39.15	0.17	-	-	-	-
KRISS	-38.066	0.03	-37.829	0.03	-37.548	0.04	-37.311	0.05	-37.574	0.06	-39.042	0.08	-41.677	0.20	-46.113	1.20
LNE	-38.069	0.052	-37.832	0.063	-37.549	0.080	-37.313	0.100	-37.566	0.140	-39.015	0.190	-41.556	0.290	-47.045	0.820
NIST	-38.102	0.05	-37.873	0.05	-37.598	0.06	-37.368	0.06	-37.650	0.08	-39.170	0.13	-41.879	0.26	-	-
NMIJ	-38.10	0.09	-37.85	0.09	-37.57	0.09	-37.33	0.09	-37.59	0.09	-39.07	0.15	-41.69	0.19	-46.43	0.67
NPL	-38.09	0.04	-37.86	0.05	-37.58	0.06	-37.34	0.08	-37.58	0.10	-39.07	0.18	-42.28	0.66	-45.40	0.75
PTB	-38.08	0.04	-37.85	0.04	-37.57	0.06	-37.32	0.08	-37.60	0.12	-39.08	0.12	-41.84	0.15	-	-

## Key comparison CCAUV.A-K3

**MEASURAND :** Pressure sensitivity level of laboratory standard microphone type LS2P  
**FREQUENCY :** 31.5 Hz to 31.5 kHz

$x_i$ : result of measurements carried out by laboratory  $i$  (unit is dB re 1 V/Pa)  
 Results from LNE have been corrected for nominal frequencies as described in section 3.2 of the Final Report.

$u_i$ : combined standard uncertainty of  $x_i$

**Microphone:** 1627783

Frequency Lab $i$	31.5 Hz		63 Hz		125 Hz		250 Hz		500 Hz		1000 Hz		2000 Hz		4000 Hz	
	$x_i$ / dB	$2u_i$ / dB														
CENAM	-38.75	0.05	-38.74	0.05	-38.75	0.06	-38.76	0.06	-38.77	0.06	-38.77	0.06	-38.75	0.06	-38.64	0.06
DPLA	-38.724	0.08	-38.741	0.04	-38.757	0.03	-38.771	0.03	-38.779	0.03	-38.780	0.03	-38.758	0.03	-38.653	0.03
GUM	-	-	-38.78	0.05	-38.79	0.05	-38.79	0.05	-38.79	0.05	-38.80	0.05	-38.77	0.05	-38.67	0.05
KRISS	-38.725	0.06	-38.734	0.04	-38.747	0.03	-38.760	0.03	-38.768	0.03	-38.769	0.03	-38.747	0.03	-38.635	0.03
LNE	-38.709	0.042	-38.725	0.034	-38.738	0.031	-38.750	0.030	-38.760	0.030	-38.762	0.031	-38.740	0.033	-38.635	0.040
NIST	-38.713	0.08	-38.736	0.06	-38.752	0.06	-38.765	0.04	-38.775	0.04	-38.777	0.04	-38.756	0.04	-38.649	0.04
NMIJ	-38.74	0.30	-38.75	0.10	-38.77	0.09	-38.78	0.09	-38.79	0.09	-38.80	0.09	-38.77	0.09	-38.67	0.09
NPL	-38.72	0.06	-38.74	0.03	-38.75	0.03	-38.77	0.03	-38.77	0.03	-38.77	0.03	-38.75	0.03	-38.65	0.03
PTB	-38.72	0.04	-38.73	0.04	-38.75	0.04	-38.76	0.04	-38.77	0.04	-38.77	0.04	-38.75	0.04	-38.65	0.04

## Key comparison CCAUV.A-K3

**MEASURAND :** Pressure sensitivity level of laboratory standard microphone type LS2P  
**FREQUENCY :** 31.5 Hz to 31.5 kHz

$x_i$ : result of measurements carried out by laboratory  $i$  (unit is dB re 1 V/Pa)  
 Results from LNE have been corrected for nominal frequencies as described in section 3.2 of the Final Report.

$u_i$ : combined standard uncertainty of  $x_i$

**Microphone:** 1627783

Frequency Lab $i$	6300 Hz		8000 Hz		10000 Hz		12500 Hz		16000 Hz		20000 Hz		25000 Hz		31500 Hz	
	$x_i$ / dB	$2u_i$ / dB														
CENAM	-38.45	0.06	-38.28	0.05	-38.09	0.05	-37.95	0.05	-38.22	0.07	-39.45	0.17	-41.68	0.21	-44.39	0.37
DPLA	-38.457	0.03	-38.290	0.03	-38.095	0.03	-37.958	0.04	-38.210	0.05	-39.438	0.08	-41.716	0.14	-44.443	0.20
GUM	-38.48	0.05	-38.30	0.06	-38.10	0.07	-37.95	0.08	-38.21	0.09	-39.47	0.17	-	-	-	-
KRISS	-38.442	0.03	-38.267	0.03	-38.075	0.04	-37.944	0.05	-38.231	0.06	-39.429	0.08	-41.664	0.20	-45.585	1.20
LNE	-38.434	0.052	-38.263	0.063	-38.068	0.080	-37.926	0.100	-38.200	0.140	-39.447	0.190	-41.816	0.290	-45.250	0.820
NIST	-38.460	0.05	-38.293	0.05	-38.102	0.06	-37.978	0.06	-38.294	0.08	-39.512	0.13	-41.724	0.26	-	-
NMIJ	-38.46	0.09	-38.27	0.09	-38.08	0.09	-37.95	0.09	-38.23	0.09	-39.43	0.15	-41.72	0.19	-46.07	0.67
NPL	-38.45	0.04	-38.29	0.05	-38.10	0.06	-37.96	0.08	-38.22	0.10	-39.37	0.18	-41.64	0.66	-45.13	0.75
PTB	-38.46	0.04	-38.29	0.04	-38.10	0.06	-37.97	0.08	-38.25	0.12	-39.45	0.12	-41.74	0.15	-	-

## Key comparison CCAUV.A-K3

**MEASURAND :** Pressure sensitivity level of laboratory standard microphone type LS2P  
**FREQUENCY :** 31.5 Hz to 31.5 kHz

$x_i$ : result of measurements carried out by laboratory  $i$  (unit is dB re 1 V/Pa)  
 Results from NIM and INMETRO have been corrected for nominal frequencies as described in section 3.2 of the Final Report.

$u_i$ : combined standard uncertainty of  $x_i$

**Microphone:** 1124046

Frequency Lab $i$	31.5 Hz		63 Hz		125 Hz		250 Hz		500 Hz		1000 Hz		2000 Hz		4000 Hz	
	$x_i$ / dB	$2u_i$ / dB														
CENAM	-38.038	0.05	-38.054	0.05	-38.066	0.06	-38.076	0.06	-38.081	0.06	-38.082	0.06	-38.064	0.06	-37.979	0.06
NMIA	-38.06	0.06	-38.08	0.04	-38.09	0.04	-38.10	0.04	-38.11	0.04	-38.11	0.04	-38.09	0.04	-38.00	0.04
DPLA	-38.056	0.08	-38.079	0.04	-38.092	0.03	-38.103	0.03	-38.108	0.03	-38.107	0.03	-38.088	0.03	-38.003	0.03
INMETRO	-38.057	0.059	-38.078	0.046	-38.093	0.046	-38.103	0.045	-38.108	0.045	-38.108	0.045	-38.088	0.045	-38.001	0.045
NIM	-38.065	0.08	-38.086	0.05	-38.102	0.05	-38.112	0.05	-38.118	0.05	-38.118	0.05	-38.099	0.05	-38.014	0.05
NRC	-	-	-38.084	0.05	-38.097	0.05	-38.109	0.04	-38.116	0.04	-38.116	0.04	-38.099	0.04	-38.019	0.04
UME	-38.050	0.08	-38.073	0.08	-38.087	0.08	-38.098	0.08	-38.104	0.08	-38.104	0.08	-38.085	0.08	-37.998	0.08
VNIIFTRI	-38.08	0.14	-38.09	0.07	-38.11	0.04	-38.12	0.04	-38.12	0.04	-38.12	0.04	-38.10	0.04	-38.02	0.04
DPLA*	-38.069	0.08	-38.091	0.04	-38.105	0.03	-38.114	0.03	-38.118	0.03	-38.116	0.03	-38.098	0.03	-38.011	0.03
NPLI*	-38.070	0.10	-38.080	0.10	-38.090	0.10	-38.100	0.10	-38.110	0.10	-38.110	0.10	-38.090	0.10	-38.001	0.10

\* participants in the bilateral comparison DPLA-NPLI, conducted as an extension of key comparison CCAUV.A-K3

## Key comparison CCAUV.A-K3

**MEASURAND :** Pressure sensitivity level of laboratory standard microphone type LS2P  
**FREQUENCY :** 31.5 Hz to 31.5 kHz

$x_i$ : result of measurements carried out by laboratory  $i$  (unit is dB re 1 V/Pa)  
 Results from NIM and INMETRO have been corrected for nominal frequencies as described in section 3.2 of the Final Report.

$u_i$ : combined standard uncertainty of  $x_i$

**Microphone:** 1124046

Frequency Lab $i$	6300 Hz		8000 Hz		10000 Hz		12500 Hz		16000 Hz		20000 Hz		25000 Hz		31500 Hz	
	$x_i$ / dB	$2u_i$ / dB														
CENAM	-37.825	0.06	-37.697	0.05	-37.565	0.05	-37.510	0.05	-37.857	0.07	-39.060	0.17	-41.195	0.21	-43.938	0.37
NMIA	-37.84	0.04	-37.71	0.04	-37.57	0.05	-37.51	0.05	-37.84	0.05	-39.02	0.06	-41.22	0.08	-43.84	0.22
DPLA	-37.846	0.03	-37.720	0.03	-37.584	0.03	-37.519	0.04	-37.873	0.05	-39.020	0.08	-41.209	0.14	-43.914	0.20
INMETRO	-37.846	0.047	-37.715	0.055	-37.576	0.074	-37.513	0.085	-37.840	0.115	-38.988	0.126	-41.104	0.167	-	-
NIM	-37.859	0.05	-37.729	0.05	-37.595	0.05	-37.544	0.10	-37.880	0.10	-39.063	0.10	-41.231	0.12	-	-
NRC	-37.875	0.04	-37.755	0.04	-37.634	0.10	-37.592	0.12	-37.944	0.14	-39.134	0.17	-	-	-	-
UME	-37.839	0.08	-37.712	0.09	-37.568	0.10	-37.508	0.11	-37.815	0.12	-38.997	0.17	-41.226	0.20	-	-
VNIIFTRI	-37.86	0.04	-37.73	0.05	-37.59	0.06	-37.52	0.09	-37.84	0.13	-39.00	0.18	-41.09	0.31	-45.79	0.96
DPLA*	-37.852	0.03	-37.721	0.03	-37.579	0.03	-37.512	0.04	-37.845	0.05	-39.005	0.08	-41.216	0.14	-41.914	0.20
NPLI*	-37.839	0.10	-37.694	0.10	-37.560	0.10	-37.471	0.10	-37.762	0.10	-38.972	0.10	-41.355	0.14	-	-

\* participants in the bilateral comparison DPLA-NPLI, conducted as an extension of key comparison CCAUV.A-K3

## Key comparison CCAUV.A-K3

**MEASURAND :** Pressure sensitivity level of laboratory standard microphone type LS2P  
**FREQUENCY :** 31.5 Hz to 31.5 kHz

$x_i$ : result of measurements carried out by laboratory  $i$  (unit is dB re 1 V/Pa)  
 Results from NIM and INMETRO have been corrected for nominal frequencies as described in section 3.2 of the Final Report.

$u_i$ : combined standard uncertainty of  $x_i$

**Microphone:** 1395455

Frequency Lab $i$	31.5 Hz		63 Hz		125 Hz		250 Hz		500 Hz		1000 Hz		2000 Hz		4000 Hz	
	$x_i$ / dB	$2u_i$ / dB														
CENAM	-38.352	0.05	-38.373	0.05	-38.390	0.06	-38.404	0.06	-38.414	0.06	-38.415	0.06	-38.389	0.06	-38.269	0.06
NMIA	-38.35	0.06	-38.37	0.04	-38.39	0.04	-38.40	0.04	-38.41	0.04	-38.41	0.04	-38.38	0.04	-38.26	0.04
DPLA	-38.348	0.08	-38.372	0.04	-38.392	0.03	-38.409	0.03	-38.417	0.03	-38.419	0.03	-38.394	0.03	-38.274	0.03
INMETRO	-38.347	0.059	-38.370	0.046	-38.390	0.046	-38.404	0.045	-38.414	0.045	-38.415	0.045	-38.389	0.045	-38.267	0.045
NIM	-38.355	0.08	-38.379	0.05	-38.399	0.05	-38.414	0.05	-38.424	0.05	-38.426	0.05	-38.401	0.05	-38.279	0.05
NRC	-	-	-38.376	0.05	-38.395	0.05	-38.411	0.04	-38.420	0.04	-38.423	0.04	-38.399	0.04	-38.284	0.04
UME	-38.338	0.08	-38.363	0.08	-38.382	0.08	-38.397	0.08	-38.407	0.08	-38.408	0.08	-38.383	0.08	-38.262	0.08
VNIIFTRI	-38.37	0.14	-38.38	0.07	-38.40	0.04	-38.42	0.04	-38.42	0.04	-38.43	0.04	-38.40	0.04	-38.28	0.04
DPLA*	-38.350	0.08	-38.372	0.04	-38.389	0.03	-38.403	0.03	-38.411	0.03	-38.412	0.03	-38.385	0.03	-38.264	0.03
NPLI*	-38.330	0.10	-38.350	0.10	-38.370	0.10	-38.380	0.10	-38.390	0.10	-38.400	0.10	-38.370	0.10	-38.251	0.10

\* participants in the bilateral comparison DPLA-NPLI, conducted as an extension of key comparison CCAUV.A-K3

## Key comparison CCAUV.A-K3

**MEASURAND :** Pressure sensitivity level of laboratory standard microphone type LS2P  
**FREQUENCY :** 31.5 Hz to 31.5 kHz

$x_i$ : result of measurements carried out by laboratory  $i$  (unit is dB re 1 V/Pa)  
 Results from NIM and INMETRO have been corrected for nominal frequencies as described in section 3.2 of the Final Report.

$u_i$ : combined standard uncertainty of  $x_i$

**Microphone:** 1395455

Frequency → Lab $i$ ↓	6300 Hz		8000 Hz		10000 Hz		12500 Hz		16000 Hz		20000 Hz		25000 Hz		31500 Hz	
	$x_i$ / dB	$2u_i$ / dB														
CENAM	-38.041	0.06	-37.841	0.05	-37.615	0.05	-37.456	0.05	-37.794	0.07	-39.238	0.17	-41.774	0.21	-44.692	0.37
NMIA	-38.04	0.04	-37.83	0.04	-37.60	0.05	-37.44	0.05	-37.78	0.05	-39.22	0.06	-41.76	0.08	-44.57	0.22
DPLA	-38.047	0.03	-37.851	0.03	-37.623	0.03	-37.462	0.04	-37.783	0.05	-39.202	0.08	-41.755	0.14	-44.508	0.20
INMETRO	-38.041	0.047	-37.841	0.055	-37.612	0.074	-37.450	0.085	-37.780	0.115	-39.194	0.126	-41.681	0.167	-	-
NIM	-38.053	0.05	-37.853	0.05	-37.623	0.05	-37.476	0.10	-37.810	0.10	-39.261	0.10	-41.760	0.12	-	-
NRC	-38.071	0.04	-37.880	0.04	-37.666	0.10	-37.524	0.12	-37.882	0.14	-39.316	0.17	-	-	-	-
UME	-38.031	0.08	-37.839	0.09	-37.599	0.10	-37.436	0.11	-37.740	0.12	-39.185	0.17	-41.820	0.20	-	-
VNIIFTRI	-38.06	0.04	-37.86	0.05	-37.63	0.06	-37.47	0.09	-37.79	0.13	-39.20	0.18	-41.68	0.31	-46.54	0.96
DPLA*	-38.038	0.03	-37.836	0.03	-37.613	0.03	-37.452	0.04	-37.781	0.05	-39.199	0.08	-41.741	0.14	-44.478	0.20
NPLI*	-38.019	0.10	-37.817	0.10	-37.590	0.10	-37.409	0.10	-37.697	0.10	-39.198	0.10	-42.009	0.14	-	-

\* participants in the bilateral comparison DPLA-NPLI, conducted as an extension of key comparison CCAUV.A-K3

## Key comparison COOMET.AUV.A-K3

**MEASURAND :** Pressure sensitivity level of laboratory standard microphone type LS2P  
**FREQUENCY :** 31.5 Hz to 31.5 kHz

$x_{i\text{-coo}}$ : result of measurements carried out by laboratory  $i$  (unit is dB re 1 V/Pa)

$u_{i\text{-coo}}$ : combined standard uncertainty of  $x_i$

A sudden change of the sensitivity of microphone 1503926 occurred during the course of the comparison.

**Microphone:** 1503926 (before change of sensitivity)

Frequency $\Rightarrow$ Lab $i$ $\downarrow$	31.5 Hz		63 Hz		125 Hz		250 Hz		500 Hz		1000 Hz		2000 Hz		4000 Hz	
	$x_{i\text{-coo}}$ / dB	$2u_{i\text{-coo}}$ / dB														
DPLA	-38.874	0.08	-38.890	0.04	-38.906	0.03	-38.918	0.03	-38.924	0.03	-38.925	0.03	-38.897	0.03	-38.772	0.03
GUM	-	-	-38.900	0.05	-38.920	0.05	-38.920	0.05	-38.930	0.05	-38.920	0.05	-38.900	0.05	-38.780	0.05
DNDI "Systema"	-38.920	0.09	-38.920	0.08	-38.930	0.07	-38.950	0.07	-38.950	0.06	-38.950	0.06	-38.920	0.06	-38.800	0.06

**Microphone:** 1503926 (after change of sensitivity)

Frequency $\Rightarrow$ Lab $i$ $\downarrow$	31.5 Hz		63 Hz		125 Hz		250 Hz		500 Hz		1000 Hz		2000 Hz		4000 Hz	
	$x_{i\text{-coo}}$ / dB	$2u_{i\text{-coo}}$ / dB														
DPLA	-38.802	0.08	-38.821	0.04	-38.839	0.03	-38.851	0.03	-38.860	0.03	-38.860	0.03	-38.833	0.03	-38.711	0.03
VNIIFTRI	-38.772	0.14	-38.783	0.07	-38.798	0.04	-38.812	0.04	-38.821	0.04	-38.823	0.04	-38.797	0.04	-38.675	0.04
INM(RO)	-38.790	0.055	-38.812	0.055	-38.830	0.046	-38.843	0.046	-38.852	0.046	-38.851	0.046	-38.825	0.046	-38.695	0.046

## Key comparison COOMET.AUV.A-K3

**MEASURAND :** Pressure sensitivity level of laboratory standard microphone type LS2P  
**FREQUENCY :** 31.5 Hz to 31.5 kHz

$x_{i\text{-coo}}$ : result of measurements carried out by laboratory  $i$  (unit is dB re 1 V/Pa)

$u_{i\text{-coo}}$ : combined standard uncertainty of  $x_i$

A sudden change of the sensitivity of microphone 1503926 occurred during the course of the comparison.

**Microphone:** 1503926 (before change of sensitivity)

Frequency $\rightarrow$ Lab $i$ $\downarrow$	6300 Hz		8000 Hz		10000 Hz		12500 Hz		16000 Hz		20000 Hz		25000 Hz		31500 Hz	
	$x_{i\text{-coo}}$ / dB	$2u_{i\text{-coo}}$ / dB														
DPLA	-38.535	0.03	-38.319	0.03	-38.058	0.03	-37.812	0.04	-37.958	0.05	-39.159	0.08	-41.582	0.14	-44.390	0.20
GUM	-38.560	0.05	-38.340	0.06	-38.090	0.07	-37.840	0.08	-37.960	0.09	-39.130	0.17	-	-	-	-
DNDI "Systema"	-38.560	0.06	-38.350	0.07	-38.090	0.08	-37.850	0.09	-38.020	0.14	-39.210	0.2	-	-	-	-

**Microphone:** 1503926 (after change of sensitivity)

Frequency $\rightarrow$ Lab $i$ $\downarrow$	6300 Hz		8000 Hz		10000 Hz		12500 Hz		16000 Hz		20000 Hz		25000 Hz		31500 Hz	
	$x_{i\text{-coo}}$ / dB	$2u_{i\text{-coo}}$ / dB														
DPLA	-38.478	0.03	-38.265	0.03	-38.015	0.03	-37.787	0.04	-37.962	0.05	-39.197	0.08	-41.593	0.14	-44.394	0.20
VNIIFTRI	-38.443	0.04	-38.231	0.05	-37.977	0.06	-37.751	0.09	-37.933	0.13	-39.175	0.18	-41.605	0.31	-45.111	0.96
INM(RO)	-38.461	0.046	-38.249	0.046	-37.991	0.046	-37.763	0.047	-37.970	0.085	-39.248	0.126	-	-	-45.994	0.218

## Key comparison COOMET.AUV.A-K3

**MEASURAND :** Pressure sensitivity level of laboratory standard microphone type LS2P  
**FREQUENCY :** 31.5 Hz to 31.5 kHz

$x_{i\text{-coo}}$ : result of measurements carried out by laboratory  $i$  (unit is dB re 1 V/Pa)

$u_{i\text{-coo}}$ : combined standard uncertainty of  $x_i$

**Microphone:** 1503933

Frequency → Lab $i$ ↓	31.5 Hz		63 Hz		125 Hz		250 Hz		500 Hz		1000 Hz		2000 Hz		4000 Hz	
	$x_{i\text{-coo}}$ / dB	$2u_{i\text{-coo}}$ / dB														
DPLA	-38.915	0.08	-38.934	0.04	-38.950	0.03	-38.960	0.03	-38.966	0.03	-38.964	0.03	-38.933	0.03	-38.803	0.03
GUM	-	-	-38.96	0.05	-38.97	0.05	-38.97	0.05	-38.98	0.05	-38.97	0.05	-38.95	0.05	-38.82	0.05
DNDI "Systema"	-38.99	0.09	-38.98	0.08	-38.99	0.07	-39.00	0.07	-39.00	0.06	-39.00	0.06	-38.96	0.06	-38.83	0.06
VNIIFTRI	-38.851	0.14	-38.859	0.07	-38.872	0.04	-38.882	0.04	-38.889	0.04	-38.887	0.04	-38.857	0.04	-38.728	0.04
INM(RO)	-38.891	0.055	-38.913	0.055	-38.928	0.046	-38.938	0.046	-38.944	0.046	-38.941	0.046	-38.91	0.046	-38.776	0.046

Frequency → Lab $i$ ↓	6300 Hz		8000 Hz		10000 Hz		12500 Hz		16000 Hz		20000 Hz		25000 Hz		31500 Hz	
	$x_{i\text{-coo}}$ / dB	$2u_{i\text{-coo}}$ / dB														
DPLA	-38.559	0.03	-38.337	0.03	-38.062	0.03	-37.807	0.04	-37.950	0.05	-39.186	0.08	-41.682	0.14	-44.577	0.20
GUM	-38.58	0.05	-38.36	0.06	-38.09	0.07	-37.82	0.08	-37.92	0.09	-39.11	0.17	-	-	-	-
DNDI "Systema"	-38.58	0.06	-38.36	0.07	-38.08	0.08	-37.82	0.09	-37.99	0.14	-39.24	0.2	-	-	-	-
VNIIFTRI	-38.485	0.04	-38.261	0.05	-37.988	0.06	-37.737	0.09	-37.896	0.13	-39.206	0.18	-41.822	0.31	-45.238	0.96
INM(RO)	-38.53	0.046	-38.306	0.046	-38.029	0.046	-37.776	0.047	-37.957	0.085	-39.259	0.126	-	-	-46.2	0.218

## Key comparison COOMET.AUV.A-K3

**MEASURAND :** Pressure sensitivity level of laboratory standard microphone type LS2P  
**FREQUENCY :** 31.5 Hz to 31.5 kHz

$x_{i\text{-coo}}$ : result of measurements carried out by laboratory  $i$  (unit is dB re 1 V/Pa)

$u_{i\text{-coo}}$ : combined standard uncertainty of  $x_i$

**Microphone:** 1526170

Frequency → Lab $i$ ↓	31.5 Hz		63 Hz		125 Hz		250 Hz		500 Hz		1000 Hz		2000 Hz		4000 Hz	
	$x_{i\text{-coo}}$ / dB	$2u_{i\text{-coo}}$ / dB														
DPLA	-38.801	0.08	-38.826	0.04	-38.842	0.03	-38.855	0.03	-38.863	0.03	-38.865	0.03	-38.842	0.03	-38.738	0.03
VNIIFTRI	-38.767	0.14	-38.777	0.07	-38.793	0.04	-38.807	0.04	-38.816	0.04	-38.819	0.04	-38.798	0.04	-38.692	0.04
INM(RO)	-38.765	0.055	-38.789	0.055	-38.807	0.046	-38.820	0.046	-38.830	0.046	-38.832	0.046	-38.810	0.046	-38.697	0.046

Frequency → Lab $i$ ↓	6300 Hz		8000 Hz		10000 Hz		12500 Hz		16000 Hz		20000 Hz		25000 Hz		31500 Hz	
	$x_{i\text{-coo}}$ / dB	$2u_{i\text{-coo}}$ / dB														
DPLA	-38.543	0.03	-38.371	0.03	-38.175	0.03	-38.031	0.04	-38.298	0.05	-39.523	0.08	-41.840	0.14	-44.565	0.20
VNIIFTRI	-38.493	0.04	-38.316	0.05	-38.116	0.06	-37.973	0.09	-38.255	0.13	-39.522	0.18	-41.942	0.31	-45.147	0.96
INM(RO)	-38.502	0.046	-38.331	0.046	-38.137	0.046	-38.010	0.047	-38.342	0.085	-39.633	0.126	-	-	-45.584	0.218

## Key comparison EUROMET.AUV.A-K3

**MEASURAND :** Pressure sensitivity level of laboratory standard microphone type LS2P  
**FREQUENCY :** 31.5 Hz to 31.5 kHz

$x_{i-\text{EUR}}$ : result of measurements carried out by laboratory  $i$  (unit is dB re 1 V/Pa)

$u_{i-\text{EUR}}$ : combined standard uncertainty of  $x_{i-\text{EUR}}$

**Microphone:** 1395456

Frequency → Lab $i$ ↓	31.5 Hz		63 Hz		125 Hz		250 Hz		500 Hz		1000 Hz		2000 Hz		4000 Hz	
	$x_{i-\text{EUR}}$ / dB	$2u_{i-\text{EUR}}$ / dB														
DPLA	-38.367	0.08	-38.397	0.04	-38.427	0.03	-38.450	0.03	-38.471	0.03	-38.482	0.03	-38.465	0.03	-38.340	0.03
INRIM	-38.330	0.08	-38.370	0.05	-38.400	0.05	-38.430	0.05	-38.450	0.05	-38.470	0.05	-38.450	0.05	-38.330	0.05
BEV	-38.347	0.03	-38.380	0.03	-38.409	0.02	-38.434	0.02	-38.454	0.02	-38.466	0.02	-38.447	0.02	-38.324	0.02
CMI	-38.390	0.08	-38.420	0.06	-38.450	0.06	-38.480	0.06	-38.500	0.06	-38.510	0.06	-38.500	0.06	-38.378	0.06
METAS	-38.332	0.046	-38.371	0.046	-38.402	0.038	-38.430	0.036	-38.453	0.036	-38.468	0.036	-38.452	0.036	-38.329	0.034
CEM	-38.365	0.05	-38.395	0.04	-38.424	0.04	-38.449	0.04	-38.470	0.04	-38.482	0.04	-38.466	0.04	-38.342	0.04
MIKES	-38.352	0.0579	-38.374	0.0284	-38.404	0.0258	-38.431	0.0259	-38.453	0.0284	-38.463	0.03	-38.445	0.0443	-38.320	0.0443
SP	-38.362	0.1	-38.379	0.08	-38.404	0.05	-38.429	0.05	-38.450	0.05	-38.459	0.05	-38.444	0.05	-38.319	0.05

CMI, METAS, and CEM data were corrected for frequency realignment to nominal frequencies

SP and MIKES data were corrected for microphone 1395456 sensitivity drift

## Key comparison EUROMET.AUV.A-K3

**MEASURAND :** Pressure sensitivity level of laboratory standard microphone type LS2P  
**FREQUENCY :** 31.5 Hz to 31.5 kHz

$x_{i-\text{EUR}}$ : result of measurements carried out by laboratory  $i$  (unit is dB re 1 V/Pa)

$u_{i-\text{EUR}}$ : combined standard uncertainty of  $x_{i-\text{EUR}}$

**Microphone:** 1395456

Frequency Lab $i$	6300 Hz		8000 Hz		10000 Hz		12500 Hz		16000 Hz		20000 Hz		25000 Hz		31500 Hz	
	$x_{i-\text{EUR}}$ / dB	$2u_{i-\text{EUR}}$ / dB														
DPLA	-38.087	0.03	-37.856	0.03	-37.575	0.03	-37.334	0.04	-37.595	0.05	-39.059	0.08	-41.779	0.14	-	-
INRIM	-38.080	0.05	-37.850	0.05	-37.570	0.08	-37.340	0.1	-37.590	0.1	-39.090	0.15	-41.780	0.2	-	-
BEV	-38.073	0.03	-37.825	0.04	-37.561	0.04	-37.318	0.05	-37.593	0.08	-39.062	0.09	-41.821	0.13	-	-
CMI	-38.141	0.07	-37.922	0.08	-37.660	0.09	-37.444	0.1	-37.692	0.1	-39.134	0.17	-41.787	0.25	-	-
METAS	-38.080	0.032	-37.848	0.036	-37.564	0.041	-37.326	0.045	-37.576	0.047	-39.035	0.063	-41.788	0.0163	-	-
CEM	-38.094	0.04	-37.862	0.04	-37.582	0.04	-37.352	0.04	-37.611	0.05	-39.147	0.08	-41.838	0.14	-	-
MIKES	-38.063	0.0444	-37.829	0.0464	-37.540	0.0535	-37.307	0.059	-37.550	0.0638	-38.942	0.0734	-	-	-	-
SP	-38.066	0.06	-37.836	0.06	-37.553	0.08	-37.322	0.1	-37.615	0.12	-39.121	0.2	-41.954	0.3	-	-

Lab $i$	Date of measurement
DPLA	15 Oct 03
INRIM	05 Nov 03
BEV	20 Nov 03
CMI	03 Dec 03
METAS	15 Jan 04
CEM	01 Mar 04
MIKES	29 Mar 04
SP	28 Apr 04

CMI, METAS, and CEM data were corrected for frequency realignment to nominal frequencies  
SP and MIKES data were corrected for microphone 1395456 sensitivity drift

## Key comparison EUROMET.AUV.A-K3

**MEASURAND :** Pressure sensitivity level of laboratory standard microphone type LS2P  
**FREQUENCY :** 31.5 Hz to 31.5 kHz

$x_{i-\text{EUR}}$ : result of measurements carried out by laboratory  $i$  (unit is dB re 1 V/Pa)

$u_{i-\text{EUR}}$ : combined standard uncertainty of  $x_{i-\text{EUR}}$

**Microphone:** 1627783

Frequency → Lab $i$ ↓	31.5 Hz		63 Hz		125 Hz		250 Hz		500 Hz		1000 Hz		2000 Hz		4000 Hz	
	$x_{i-\text{EUR}}$ / dB	$2u_{i-\text{EUR}}$ / dB														
DPLA	-38.725	0.08	-38.736	0.04	-38.752	0.03	-38.767	0.03	-38.774	0.03	-38.775	0.03	-38.751	0.03	-38.645	0.03
INRIM	-38.690	0.08	-38.710	0.05	-38.730	0.05	-38.740	0.05	-38.750	0.05	-38.760	0.05	-38.740	0.05	-38.630	0.05
BEV	-38.720	0.03	-38.736	0.03	-38.750	0.02	-38.763	0.02	-38.771	0.02	-38.772	0.02	-38.748	0.02	-38.642	0.02
CMI	-38.920	0.08	-38.820	0.06	-38.820	0.06	-38.810	0.06	-38.810	0.06	-38.810	0.06	-38.790	0.06	-38.689	0.06
METAS	-38.684	0.046	-38.708	0.046	-38.727	0.038	-38.743	0.036	-38.755	0.036	-38.759	0.036	-38.739	0.036	-38.635	0.034
CEM	-38.744	0.05	-38.757	0.04	-38.770	0.04	-38.782	0.04	-38.790	0.04	-38.792	0.04	-38.769	0.04	-38.664	0.04
MIKES	-38.780	0.0579	-38.744	0.0284	-38.746	0.0258	-38.760	0.0258	-38.766	0.0283	-38.769	0.03	-38.749	0.0442	-38.644	0.0432
SP	-38.713	0.1	-38.720	0.08	-38.732	0.05	-38.744	0.05	-38.752	0.05	-38.751	0.05	-38.729	0.05	-38.623	0.05

CMI, METAS, and CEM data were corrected for frequency realignment to nominal frequencies

## Key comparison EUROMET.AUV.A-K3

**MEASURAND :** Pressure sensitivity level of laboratory standard microphone type LS2P  
**FREQUENCY :** 31.5 Hz to 31.5 kHz

$x_{i-\text{EUR}}$ : result of measurements carried out by laboratory  $i$  (unit is dB re 1 V/Pa)

$u_{i-\text{EUR}}$ : combined standard uncertainty of  $x_{i-\text{EUR}}$

**Microphone:** 1627783

Frequency Lab $i$	6300 Hz		8000 Hz		10000 Hz		12500 Hz		16000 Hz		20000 Hz		25000 Hz		31500 Hz	
	$x_{i-\text{EUR}}$ / dB	$2u_{i-\text{EUR}}$ / dB														
DPLA	-38.447	0.03	-38.273	0.03	-38.078	0.03	-37.939	0.04	-38.213	0.05	-39.425	0.08	-41.721	0.14	-	-
INRIM	-38.440	0.05	-38.270	0.05	-38.070	0.08	-37.940	0.1	-38.200	0.1	-39.440	0.15	-41.680	0.2	-	-
BEV	-38.444	0.03	-38.254	0.04	-38.071	0.04	-37.915	0.05	-38.197	0.08	-39.394	0.10	-41.700	0.14	-	-
CMI	-38.511	0.07	-38.354	0.08	-38.170	0.09	-38.061	0.1	-38.317	0.1	-39.469	0.17	-41.624	0.25	-	-
METAS	-38.444	0.032	-38.272	0.036	-38.077	0.041	-37.942	0.045	-38.213	0.047	-39.423	0.063	-41.738	0.0163	-	-
CEM	-38.471	0.04	-38.299	0.04	-38.105	0.04	-37.971	0.04	-38.245	0.05	-39.500	0.08	-41.660	0.14	-	-
MIKES	-38.446	0.0437	-38.275	0.0448	-38.075	0.0505	-37.948	0.0554	-38.207	0.0633	-39.351	0.0754	-	-	-	-
SP	-38.427	0.06	-38.256	0.06	-38.060	0.08	-37.928	0.1	-38.226	0.12	-39.426	0.2	-41.727	0.3	-	-

Lab $i$	Date of measurement
DPLA	15 Oct 03
INRIM	05 Nov 03
BEV	20 Nov 03
CMI	03 Dec 03
METAS	15 Jan 04
CEM	01 Mar 04
MIKES	29 Mar 04
SP	28 Apr 04

CMI, METAS, and CEM data were corrected for frequency realignment to nominal frequencies

## Key comparison APMP.AUV.A-K3.1

**MEASURAND :** Pressure sensitivity level of laboratory standard microphone type LS2P  
**FREQUENCY :** 31.5 Hz to 25 kHz

$x_{i\text{-APMP(K3.1)}}$ : result of measurements carried out by laboratory  $i$  (unit is dB re 1 V/Pa)

$U_{i\text{-APMP(K3.1)}}$ : expanded uncertainty ( $k = 2$ ) of  $x_{i\text{-APMP(K3.1)}}$

**Microphone:** 2341431

Lab $i$	KRISS		KIM-LIPI	
	$x_{i\text{-APMP(K3.1)}}$ / dB	$U_{i\text{-APMP(K3.1)}}$ / dB	$x_{i\text{-APMP(K3.1)}}$ / dB	$U_{i\text{-APMP(K3.1)}}$ / dB
31.5 Hz	-38.72	0.08	-38.74	0.09
63 Hz	-38.73	0.05	-38.74	0.07
125 Hz	-38.73	0.05	-38.75	0.06
250 Hz	-38.74	0.04	-38.75	0.06
500 Hz	-38.74	0.04	-38.75	0.06
1000 Hz	-38.73	0.04	-38.75	0.06
2000 Hz	-38.71	0.04	-38.73	0.06
4000 Hz	-38.60	0.04	-38.62	0.06
6300 Hz	-38.40	0.04	-38.43	0.06
8000 Hz	-38.21	0.04	-38.25	0.06
10000 Hz	-37.99	0.05	-38.02	0.06
12500 Hz	-37.78	0.06	-37.81	0.07
16000 Hz	-37.87	0.07	-37.90	0.08
20000 Hz	-38.89	0.10	-38.98	0.12
25000 Hz	-41.33	0.20	-41.43	0.17

## Key comparison APMP.AUV.A-K3

**MEASURAND :** Pressure sensitivity level of laboratory standard microphone type LS2P

**FREQUENCY :** 31.5 Hz to 25 kHz

$x_{i-\text{APMP(K3)}}$ : result of measurements carried out by laboratory  $i$  (unit is dB re 1 V/Pa)

$U_{i-\text{APMP(K3)}}$ : expanded uncertainty ( $k = 2$ ) of  $x_{i-\text{APMP(K3)}}$

**Microphone** 1763688

The measurement results reported by the participants can be found in Table 2a and 3 of the APMP.AUV.A-K3 Final Report.

**Microphone** 2341431

The measurement results reported by the participants can be found in Table 2b and 3 of the APMP.AUV.A-K3 Final Report.

CCAUVA-K3, COOMET.AUV.A-K3, EUROMET.AUV.A-K3, APMP.AUV.A-K3.1, and APMP.AUV.A-K3

Key comparison CCAUV.A-K3

MEASURAND : Pressure sensitivity level of laboratory standard microphone type LS2P

FREQUENCY : 31.5 Hz to 31.5 kHz

For each microphone and for each frequency, the key comparison values,  $x_R$ , and its associated standard uncertainty,  $u_R$ , are computed as explained in sections 4.2 and 5.1 of the CCAUV.A-K3 Final Report (unit is dB re 1 V/Pa).

	Microphone 1395456		Microphone 1627783		Microphone 1124046		Microphone 1395455	
Frequency / Hz	$x_R$	$2u_R$	$x_R$	$2u_R$	$x_R$	$2u_R$	$x_R$	$2u_R$
/ Hz	/ dB	/ dB						
31.5	-38.367	0.019	-38.725	0.019	-38.049	0.022	-38.345	0.022
63	-38.402	0.013	-38.740	0.013	-38.077	0.015	-38.372	0.015
125	-38.430	0.012	-38.753	0.012	-38.092	0.014	-38.391	0.014
250	-38.451	0.012	-38.766	0.012	-38.102	0.013	-38.406	0.013
500	-38.472	0.012	-38.773	0.012	-38.107	0.013	-38.414	0.013
1000	-38.481	0.012	-38.775	0.012	-38.107	0.013	-38.416	0.013
2000	-38.464	0.012	-38.753	0.012	-38.089	0.013	-38.390	0.013
4000	-38.335	0.012	-38.649	0.012	-38.004	0.013	-38.271	0.013
6300	-38.084	0.013	-38.456	0.013	-37.849	0.014	-38.048	0.014
8000	-37.850	0.013	-38.285	0.013	-37.720	0.014	-37.848	0.014
10000	-37.567	0.016	-38.091	0.016	-37.581	0.016	-37.619	0.016
12500	-37.328	0.019	-37.955	0.019	-37.519	0.020	-37.459	0.020
16000	-37.579	0.024	-38.223	0.024	-37.866	0.024	-37.795	0.024
20000	-39.073	0.036	-39.444	0.036	-39.030	0.034	-39.224	0.034
25000	-41.760	0.061	-41.714	0.061	-41.206	0.049	-41.756	0.049
31500	-44.920	0.144	-44.579	0.144	-44.035	0.132	-44.706	0.132

At a given frequency, the degree of equivalence of laboratory  $i$  with respect to the key comparison reference value is given by a pair of terms both expressed in dB re 1 V/Pa:  $D_i$  and its expanded uncertainty ( $k = 2$ ),  $U_i$ . The degrees of equivalence are computed as explained in sections 4.3 and 5.2 of the CCAUV.A-K3 Final Report, and in the Final Report of the bilateral comparison DPLA-NPLI.

At a given frequency, the degree of equivalence between two laboratories  $i$  and  $j$  is given by a pair of terms:  $D_{ij}$  and its expanded uncertainty ( $k = 2$ ),  $U_{ij}$ , both expressed in dB re 1 V/Pa. The computation of these two terms is explained in section 5.3 of the CCAUV.A-K3 Final Report, and in the Final Report of the bilateral comparison DPLA-NPLI.

The full matrices of equivalence are computed for frequencies 250 Hz and 1000 Hz.

## Linking COOMET.AUV.A-K3 to CCAUV.A-K3

DPLA provides the link between key comparisons CCAUV.A-K3 and COOMET.AUV.A-K3.

The linkage process is described in section 5 of the COOMET.AUV.A-K3 Final Report.

At a given frequency, the degree of equivalence of laboratory  $i$  participant in COOMET.AUV.A-K3 with respect to the key comparison reference value is given by a pair of terms both expressed in dB re 1 V/Pa:  $D_i$  and its expanded uncertainty ( $k = 2$ ),  $U_i$ .

The degrees of equivalence are computed as explained in section 5 of the COOMET.AUV.A-K3 Final Report.

At a given frequency, the degree of equivalence between two laboratories  $i$  and  $j$  is given by a pair of terms:

$D_{ij}$  and its expanded uncertainty ( $k = 2$ ),  $U_{ij}$ , both expressed in dB re 1 V/Pa.

The computation of these two terms is explained in section 5 of the COOMET.AUV.A-K3 Final Report when one or two laboratories participate in COOMET.AUV.A-K3.

This makes it possible to extend the matrices of equivalence obtained in CCAUV.A-K3 for frequencies 250 Hz and 1000 Hz to participants in COOMET.AUV.A-K3.

## Linking EUROMET.AUV.A-K3 to CCAUV.A-K3

DPLA provides the link between key comparisons CCAUV.A-K3 and EUROMET.AUV.A-K3.

The linkage process is described in section 6 of the EUROMET.AUV.A-K3 Final Report.

At a given frequency, the degree of equivalence of laboratory  $i$  participant in EUROMET.AUV.A-K3 with respect to the key comparison reference value is given by a pair of terms both expressed in dB re 1 V/Pa:  $D_i$  and its expanded uncertainty ( $k = 2$ ),  $U_i$ .

The degrees of equivalence are computed as explained in section 6 of the EUROMET.AUV.A-K3 Final Report.

At a given frequency, the degree of equivalence between two laboratories  $i$  and  $j$  is given by a pair of terms:

$D_{ij}$  and its expanded uncertainty ( $k = 2$ ),  $U_{ij}$ , both expressed in dB re 1 V/Pa.

The computation of these two terms is explained in section 7 of the EUROMET.AUV.A-K3 Final Report when both of the laboratories are participants in EUROMET.AUV.A-K3.

This makes it possible to extend the matrices of equivalence obtained in CCAUV.A-K3 and COOMET.AUV.A-K3 for frequencies 250 Hz and 1000 Hz with pair-wise degrees of equivalence computed inside EUROMET.AUV.A-K3.

## Linking APMP.AUV.A-K3.1 to CCAUV.A-K3

KRISS provides the link between key comparisons CCAUV.A-K3 and APMP.AUV.A-K3.1.

The linkage process is described in section 8 of the APMP.AUV.A-K3.1 Final Report.

No pair-wise degrees of equivalence between KIM-LIPI and other participants in CCAUV.A-K3 have been computed.

## Linking APMP.AUV.A-K3 to CCAUV.A-K3

NMIJ, KRISS, NIM, and NMIA provide the link between key comparisons CCAUV.A-K3 and APMP.AUV.A-K3. The linkage process is described in section 6 of the APMP.AUV.A-K3 Final Report.

At a given frequency, the degree of equivalence of laboratory  $i$  participant in APMP.AUV.A-K3 with respect to the key comparison reference value is given by a pair of terms both expressed in dB re 1 V/Pa:  $D_i$  and its expanded uncertainty ( $k = 2$ ),  $U_i$ . The degrees of equivalence are computed as explained in section 6 of the APMP.AUV.A-K3 Final Report.

At a given frequency, the degree of equivalence between two laboratories  $i$  and  $j$  participant in APMP.AUV.A-K3 is given by a pair of terms:  $D_{ij}$  and its expanded uncertainty ( $k = 2$ ),  $U_{ij}$ , both expressed in dB re 1 V/Pa.

The computation of these two terms is explained in section 7 of the APMP.AUV.A-K3 Final Report when both of the laboratories are participants in APMP.AUV.A-K3, and the numerical values can be found from Table 11a to 11p in the APMP.AUV.A-K3 Final Report.

This makes it possible to extend the graphs of equivalence of the participants in CCAUV.A-K3 with the participants in APMP.AUV.A-K3 for frequencies 250 Hz and 1000 Hz.

CCAUV.A-K3, COOMET.AUV.A-K3, EUROMET.AUV.A-K3, and APMP.AUV.A-K3.1

MEASURAND : Pressure sensitivity level of laboratory standard microphone type LS2P

FREQUENCY : 31.5 Hz to 31.5 kHz

Degrees of equivalence relative to the key comparison reference values (unit is dB re 1 V/Pa)

Frequency Lab $i$	31.5 Hz		63 Hz		125 Hz		250 Hz		500 Hz		1000 Hz		2000 Hz		4000 Hz	
	$D_i$ / dB	$U_i$ / dB														
CENAM	-0.001	0.041	0.011	0.043	0.015	0.052	0.014	0.052	0.013	0.052	0.013	0.052	0.013	0.052	0.013	0.052
NMIA	-0.008	0.052	0.000	0.034	0.001	0.035	0.004	0.035	0.001	0.035	0.002	0.035	0.005	0.035	0.007	0.035
DPLA	-0.005	0.069	-0.002	0.033	-0.003	0.024	-0.004	0.025	-0.004	0.025	-0.004	0.025	-0.004	0.025	-0.003	0.025
GUM	-	-	-0.034	0.045	-0.028	0.045	-0.016	0.045	-0.017	0.045	-0.017	0.045	-0.012	0.045	-0.013	0.045
INMETRO	-0.005	0.051	0.001	0.040	0.000	0.041	0.001	0.040	0.000	0.040	0.000	0.040	0.001	0.040	0.003	0.040
KRISS	-0.001	0.053	0.008	0.035	0.009	0.025	0.008	0.026	0.009	0.026	0.008	0.026	0.009	0.026	0.016	0.025
LNE	0.009	0.035	0.015	0.029	0.016	0.026	0.016	0.026	0.015	0.026	0.013	0.027	0.014	0.028	0.014	0.035
NIM	-0.013	0.071	-0.008	0.044	-0.009	0.044	-0.009	0.045	-0.010	0.045	-0.010	0.045	-0.010	0.045	-0.009	0.044
NIST	0.006	0.072	0.004	0.054	0.002	0.054	-0.001	0.035	-0.003	0.035	-0.004	0.035	-0.006	0.035	-0.006	0.035
NMIJ	-0.019	0.276	-0.014	0.091	-0.018	0.082	-0.016	0.082	-0.022	0.082	-0.027	0.082	-0.022	0.082	-0.023	0.082
NPL	0.006	0.053	-0.004	0.025	-0.003	0.025	-0.006	0.026	-0.002	0.026	0.003	0.026	-0.002	0.026	-0.003	0.025
NRC	-	-	-0.005	0.044	-0.005	0.044	-0.006	0.035	-0.007	0.035	-0.008	0.035	-0.009	0.035	-0.014	0.035
PTB	0.001	0.033	0.006	0.035	0.002	0.035	0.004	0.035	0.003	0.035	0.003	0.035	0.003	0.035	0.002	0.035
UME	0.003	0.071	0.007	0.072	0.007	0.073	0.007	0.073	0.005	0.073	0.006	0.073	0.006	0.073	0.007	0.073
VNIIFTRI	-0.028	0.128	-0.010	0.063	-0.014	0.035	-0.016	0.035	-0.009	0.035	-0.013	0.035	-0.010	0.035	-0.013	0.035
NPLI	0.005	0.081	0.015	0.074	0.014	0.073	0.015	0.073	0.011	0.073	0.005	0.073	0.008	0.073	0.008	0.073
GUM	-	-	-0.020	0.051	-0.019	0.049	-0.010	0.049	-0.013	0.049	-0.004	0.049	-0.014	0.049	-0.016	0.049
DNDI "Systema"	-0.065	0.092	-0.040	0.077	-0.034	0.067	-0.040	0.067	-0.033	0.058	-0.034	0.058	-0.029	0.058	-0.031	0.058
VNIIFTRI	0.038	0.130	0.052	0.065	0.054	0.039	0.052	0.039	0.051	0.039	0.050	0.039	0.049	0.039	0.049	0.039
INM(RO)	0.020	0.061	0.021	0.053	0.020	0.044	0.018	0.044	0.017	0.044	0.018	0.044	0.018	0.044	0.025	0.044
INRIM	0.031	0.093	0.024	0.055	0.022	0.052	0.020	0.052	0.019	0.052	0.010	0.052	0.010	0.052	0.009	0.052
BEV	0.007	0.063	0.006	0.041	0.007	0.030	0.006	0.030	0.006	0.030	0.006	0.030	0.007	0.030	0.006	0.030
CMI	-0.114	0.093	-0.056	0.063	-0.048	0.060	-0.040	0.060	-0.036	0.060	-0.035	0.060	-0.040	0.060	-0.044	0.060
METAS	0.033	0.071	0.025	0.052	0.023	0.042	0.018	0.041	0.015	0.041	0.011	0.041	0.009	0.041	0.007	0.039
CEM	-0.013	0.073	-0.012	0.047	-0.010	0.044	-0.011	0.044	-0.011	0.044	-0.012	0.044	-0.013	0.044	-0.014	0.044
MIKES	-0.025	0.078	0.005	0.040	0.012	0.033	0.009	0.033	0.009	0.035	0.009	0.036	0.008	0.047	0.007	0.046
SP	0.003	0.108	0.015	0.080	0.019	0.052	0.018	0.052	0.018	0.052	0.020	0.052	0.018	0.052	0.018	0.052
KIM-LIPI	-0.02	0.14	0.00	0.10	-0.01	0.09	0.00	0.09	0.00	0.09	-0.01	0.09	-0.01	0.09	0.00	0.09

CCAUV.A-K3, COOMET.AUV.A-K3, EUROMET.AUV.A-K3, and APMP.AUV.A-K3.1

**MEASURAND :** Pressure sensitivity level of laboratory standard microphone type LS2P

**FREQUENCY :** 31.5 Hz to 31.5 kHz

Degrees of equivalence relative to the key comparison reference values (unit is dB re 1 V/Pa)

Frequency → Lab <i>i</i> ↓	6300 Hz		8000 Hz		10000 Hz		12500 Hz		16000 Hz		20000 Hz		25000 Hz		31500 Hz	
	<i>D<sub>i</sub></i> / dB	<i>U<sub>i</sub></i> / dB														
CENAM	0.013	0.052	0.011	0.043	0.007	0.042	0.004	0.041	0.001	0.059	-0.017	0.147	0.004	0.180	0.115	0.304
NMIA	0.008	0.035	0.014	0.035	0.015	0.044	0.014	0.042	0.021	0.041	0.007	0.046	-0.009	0.059	0.165	0.163
DPLA	0.001	0.024	-0.002	0.024	-0.003	0.023	0.000	0.031	0.010	0.040	0.015	0.065	-0.002	0.116	0.172	0.132
GUM	-0.020	0.045	-0.013	0.054	-0.006	0.063	0.002	0.072	0.001	0.080	-0.052	0.153	-	-	-	-
INMETRO	0.005	0.042	0.006	0.049	0.006	0.067	0.007	0.076	0.021	0.104	0.036	0.112	0.089	0.147	-	-
KRISS	0.016	0.025	0.019	0.025	0.017	0.034	0.014	0.043	-0.001	0.051	0.023	0.066	0.066	0.176	-1.099	1.099
LNE	0.019	0.046	0.020	0.057	0.021	0.072	0.022	0.091	0.018	0.127	0.027	0.172	0.051	0.262	-1.398	0.745
NIM	-0.007	0.044	-0.007	0.044	-0.009	0.044	-0.021	0.090	-0.014	0.090	-0.035	0.087	-0.014	0.101	-	-
NIST	-0.011	0.045	-0.016	0.044	-0.021	0.053	-0.031	0.053	-0.071	0.071	-0.083	0.115	-0.065	0.233	-	-
NMIJ	-0.010	0.082	0.007	0.082	0.004	0.082	0.002	0.081	-0.009	0.080	0.008	0.134	0.032	0.167	-1.500	0.604
NPL	0.000	0.035	-0.008	0.044	-0.011	0.053	-0.008	0.072	0.001	0.090	0.038	0.163	-0.223	0.606	-0.515	0.679
NRC	-0.025	0.035	-0.033	0.035	-0.050	0.091	-0.069	0.109	-0.082	0.127	-0.098	0.154	-	-	-	-
PTB	0.000	0.035	-0.003	0.035	-0.006	0.053	-0.003	0.072	-0.024	0.109	-0.007	0.106	-0.053	0.127	-	-
UME	0.013	0.073	0.009	0.082	0.017	0.091	0.017	0.100	0.053	0.108	0.036	0.154	-0.042	0.179	-	-
VNIIFTRI	-0.012	0.035	-0.011	0.044	-0.010	0.053	-0.006	0.081	0.016	0.118	0.027	0.163	0.096	0.282	-1.795	0.877
NPLI	0.016	0.073	0.021	0.073	0.018	0.073	0.042	0.075	0.092	0.076	0.030	0.084	-0.206	0.125	-	-
GUM	-0.022	0.049	-0.024	0.058	-0.033	0.067	-0.020	0.077	0.023	0.088	0.066	0.163	-	-	-	-
DNDI "Systema"	-0.022	0.058	-0.029	0.067	-0.028	0.076	-0.025	0.086	-0.042	0.132	-0.039	0.190	-	-	-	-
VNIIFTRI	0.053	0.039	0.053	0.047	0.055	0.056	0.055	0.083	0.050	0.119	0.015	0.166	-0.087	0.286	-0.498	0.869
INM(RO)	0.029	0.044	0.027	0.044	0.029	0.045	0.025	0.047	-0.011	0.081	-0.064	0.120	-	-	-1.259	0.236
INRIM	0.007	0.052	0.002	0.052	0.004	0.078	-0.004	0.098	0.018	0.101	-0.008	0.153	0.018	0.215	-	-
BEV	0.009	0.037	0.023	0.044	0.008	0.045	0.020	0.057	0.018	0.085	0.029	0.113	-0.013	0.170	-	-
CMI	-0.059	0.069	-0.076	0.078	-0.091	0.087	-0.116	0.098	-0.091	0.101	-0.044	0.170	0.042	0.256	-	-
METAS	0.005	0.038	0.002	0.041	0.003	0.046	0.002	0.053	0.019	0.060	0.028	0.087	-0.015	0.111	-	-
CEM	-0.015	0.044	-0.018	0.044	-0.020	0.045	-0.025	0.049	-0.015	0.062	-0.066	0.098	-0.001	0.170	-	-
MIKES	0.013	0.047	0.010	0.048	0.017	0.053	0.009	0.061	0.035	0.071	0.110	0.095	-	-	-	-
SP	0.021	0.060	0.016	0.060	0.018	0.078	0.012	0.098	-0.007	0.118	-0.017	0.195	-0.093	0.298	-	-
KIM-LIPI	-0.01	0.09	-0.02	0.09	-0.01	0.09	-0.02	0.11	-0.03	0.12	-0.07	0.17	-0.03	0.28	-	-

CCAUV.A-K3, COOMET.AUV.A-K3, EUROMET.AUV.A-K3, and APMP.AUV.A-K3.1

Frequency : 250 Hz

Matrix of equivalence (unit is dB re 1 V/Pa)

	Lab <i>j</i> →															
Lab <i>i</i> ↓	Lab <i>j</i> →		<i>D<sub>i</sub></i>	<i>U<sub>i</sub></i>	<i>D<sub>ij</sub></i>	<i>U<sub>ij</sub></i>	<i>D<sub>ij</sub></i>									
	/ dB	/ dB	/ dB	/ dB	/ dB	/ dB	/ dB	/ dB	/ dB	/ dB	/ dB	/ dB	/ dB	/ dB	/ dB	
CENAM	0.014	0.052			0.010	0.064	0.018	0.059	0.030	0.070	0.013	0.067	0.006	0.059	-0.002	0.059
NMIA	0.004	0.035	-0.010	0.064			-0.008	0.045	-0.020	0.058	0.003	0.056	0.004	0.044	0.012	0.044
DPLA	-0.004	0.025	-0.018	0.059	0.008	0.045			0.012	0.053	-0.005	0.049	-0.012	0.038	-0.020	0.038
GUM	-0.016	0.045	-0.030	0.070	0.020	0.058	-0.012	0.053			-0.017	0.061	-0.025	0.054	-0.032	0.054
INMETRO	0.001	0.040	-0.013	0.067	-0.003	0.056	0.005	0.049	0.017	0.061			0.008	0.048	0.015	0.048
KRISS	0.008	0.026	-0.006	0.059	-0.004	0.044	0.012	0.038	0.025	0.054	-0.008	0.048			-0.008	0.039
LNE	0.016	0.026	0.002	0.059	-0.012	0.044	0.020	0.038	0.032	0.054	-0.015	0.048	0.008	0.039		
NIM	-0.009	0.045	-0.023	0.070	-0.013	0.059	-0.005	0.053	0.007	0.064	-0.010	0.062	-0.017	0.052	-0.025	0.052
NIST	-0.001	0.035	-0.015	0.064	0.005	0.051	0.003	0.045	0.016	0.059	0.001	0.054	-0.009	0.046	-0.017	0.046
NMIJ	-0.016	0.082	-0.030	0.098	0.020	0.090	-0.012	0.087	0.000	0.095	0.017	0.092	-0.025	0.087	-0.032	0.087
NPL	-0.006	0.026	-0.020	0.059	0.010	0.044	-0.002	0.038	0.010	0.054	0.007	0.048	-0.015	0.039	-0.022	0.039
NRC	-0.006	0.035	-0.020	0.064	-0.010	0.052	-0.002	0.045	0.010	0.058	-0.007	0.056	-0.014	0.044	-0.022	0.044
PTB	0.004	0.035	-0.010	0.064	0.000	0.051	0.008	0.045	0.020	0.059	-0.003	0.054	-0.005	0.046	-0.012	0.046
UME	0.007	0.073	-0.007	0.091	0.003	0.082	0.011	0.078	0.023	0.086	0.006	0.085	-0.002	0.078	-0.009	0.078
VNIIFTRI	-0.016	0.035	-0.030	0.064	-0.020	0.052	-0.012	0.045	0.000	0.058	-0.017	0.056	-0.024	0.044	-0.032	0.044
NPLI	0.015	0.073	0.001	0.089	0.011	0.081	0.019	0.077	0.031	0.085	0.014	0.083	0.007	0.077	-0.001	0.077
GUM	-0.010	0.049	-0.024	0.071	-0.014	0.060	-0.006	0.055	0.007	0.066	-0.010	0.063	-0.018	0.055	-0.025	0.055
DNDI "Systema"	-0.040	0.067	-0.054	0.084	-0.044	0.075	-0.036	0.071	-0.023	0.080	-0.040	0.078	-0.048	0.071	-0.055	0.071
VNIIFTRI	0.052	0.039	0.038	0.065	0.048	0.052	0.056	0.046	0.068	0.059	0.051	0.056	0.043	0.046	0.036	0.046
INM(RO)	0.018	0.044	0.004	0.068	0.014	0.056	0.022	0.050	0.034	0.063	0.018	0.059	0.010	0.051	0.002	0.051
INRIM	0.020	0.052														
BEV	0.006	0.030														
CMI	-0.040	0.060														
METAS	0.018	0.041														
CEM	-0.011	0.044														
MIKES	0.009	0.033														
SP	0.018	0.052														
KIM-LIPI	0.00	0.09														

Not computed

Not computed

CCAUV.A-K3, COOMET.AUV.A-K3, EUROMET.AUV.A-K3, and APMP.AUV.A-K3.1

Frequency : 250 Hz

Matrix of equivalence (unit is dB re 1 V/Pa) - continued

		Lab <i>j</i>		Lab <i>i</i>												
		NIM		NIST		NMJJ		NPL		NRC		PTB		UME		
		<i>D<sub>ij</sub></i> / dB	<i>U<sub>ij</sub></i> / dB													
CENAM	0.014	0.052	0.023	0.070	0.015	0.064	0.030	0.098	0.020	0.059	0.020	0.064	0.010	0.064	0.007	0.091
NMIA	0.004	0.035	0.013	0.059	-0.005	0.051	-0.020	0.090	-0.010	0.044	0.010	0.052	0.000	0.051	-0.003	0.082
DPLA	-0.004	0.025	0.005	0.053	-0.003	0.045	0.012	0.087	0.002	0.038	0.002	0.045	-0.008	0.045	-0.011	0.078
GUM	-0.016	0.045	-0.007	0.064	-0.016	0.059	0.000	0.095	-0.010	0.054	-0.010	0.058	-0.020	0.059	-0.023	0.086
INMETRO	0.001	0.040	0.010	0.062	-0.001	0.054	-0.017	0.092	-0.007	0.048	0.007	0.056	0.003	0.054	-0.006	0.085
KRISS	0.008	0.026	0.017	0.052	0.009	0.046	0.025	0.087	0.015	0.039	0.014	0.044	0.005	0.046	0.002	0.078
LNE	0.016	0.026	0.025	0.052	0.017	0.046	0.032	0.087	0.022	0.039	0.022	0.044	0.012	0.046	0.009	0.078
NIM	-0.009	0.045			0.008	0.058	-0.007	0.094	0.003	0.052	-0.003	0.059	0.013	0.058	-0.015	0.087
NIST	-0.001	0.035	-0.008	0.058			0.016	0.091	0.006	0.046	0.005	0.051	-0.005	0.052	-0.007	0.082
NMIJ	-0.016	0.082	0.007	0.094	-0.016	0.091			-0.010	0.087	-0.010	0.090	-0.020	0.091	-0.023	0.110
NPL	-0.006	0.026	-0.003	0.052	-0.006	0.046	0.010	0.087			0.000	0.044	-0.010	0.046	-0.013	0.078
NRC	-0.006	0.035	0.003	0.059	-0.005	0.051	0.010	0.090	0.000	0.044			0.010	0.051	-0.013	0.082
PTB	0.004	0.035	-0.013	0.058	0.005	0.052	0.020	0.091	0.010	0.046	-0.010	0.051			-0.003	0.082
UME	0.007	0.073	0.015	0.087	0.007	0.082	0.023	0.110	0.013	0.078	0.013	0.082	0.003	0.082		
VNIIFTRI	-0.016	0.035	-0.007	0.059	-0.015	0.051	0.000	0.090	-0.010	0.044	-0.010	0.052	-0.020	0.051	-0.023	0.082
NPLI	0.015	0.073	0.024	0.085	0.016	0.081	0.031	0.110	0.021	0.077	0.021	0.081	0.011	0.081	0.008	0.103
GUM	-0.010	0.049	-0.001	0.066	-0.009	0.060	0.007	0.096	-0.003	0.055	-0.004	0.060	-0.013	0.060	-0.016	0.088
DNDI "Systema"	-0.040	0.067	-0.031	0.080	-0.039	0.075	-0.023	0.106	-0.033	0.071	-0.034	0.075	-0.043	0.075	-0.046	0.099
VNIIFTRI	0.052	0.039	0.061	0.059	0.052	0.052	0.068	0.091	0.058	0.046	0.058	0.052	0.048	0.052	0.045	0.082
INM(RO)	0.018	0.044	0.027	0.062	0.019	0.056	0.034	0.093	0.024	0.051	0.024	0.056	0.014	0.056	0.012	0.085
INRIM	0.020	0.052														
BEV	0.006	0.030														
CMI	-0.040	0.060														
METAS	0.018	0.041														
CEM	-0.011	0.044														
MIKES	0.009	0.033														
SP	0.018	0.052														
KIM-LIPI	0.00	0.09														

Not computed

**CCAUV.A-K3, COOMET.AUV.A-K3, EUROMET.AUV.A-K3, and APMP.AUV.A-K3.1**

Frequency : 250 Hz

#### **Matrix of equivalence (unit is dB re 1 V/Pa) - continued**

Lab *j* 

**CCAUV.A-K3, COOMET.AUV.A-K3, EUROMET.AUV.A-K3, and APMP.AUV.A-K3.1**

Frequency : 250 Hz

### **Matrix of equivalence (unit is dB re 1 V/Pa) - continued**

Lab *j* 

CCAUV.A-K3, COOMET.AUV.A-K3, EUROMET.AUV.A-K3, and APMP.AUV.A-K3.1

Frequency : 1000 Hz

Matrix of equivalence (unit is dB re 1 V/Pa)

Lab *j* →

Lab <i>i</i> ↓			CENAM		NMIA		DPLA		GUM		INMETRO		KRISS		LNE	
	<i>D<sub>i</sub></i> / dB	<i>U<sub>i</sub></i> / dB	<i>D<sub>ij</sub></i> / dB	<i>U<sub>ij</sub></i> / dB												
CENAM	0.013	0.052			0.012	0.064	0.017	0.059	0.030	0.070	0.013	0.067	0.005	0.059	0.000	0.060
NMIA	0.002	0.035	-0.012	0.064			-0.005	0.045	-0.018	0.058	0.002	0.056	0.007	0.044	0.012	0.045
DPLA	-0.004	0.025	-0.017	0.059	0.005	0.045			0.013	0.053	-0.004	0.049	-0.012	0.038	-0.017	0.038
GUM	-0.017	0.045	-0.030	0.070	0.018	0.058	-0.013	0.053			-0.017	0.061	-0.025	0.054	-0.030	0.054
INMETRO	0.000	0.040	-0.013	0.067	-0.002	0.056	0.004	0.049	0.017	0.061			0.008	0.048	0.013	0.049
KRISS	0.008	0.026	-0.005	0.059	-0.007	0.044	0.012	0.038	0.025	0.054	-0.008	0.048			-0.005	0.040
LNE	0.013	0.027	0.000	0.060	-0.012	0.045	0.017	0.038	0.030	0.054	-0.013	0.049	0.005	0.040		
NIM	-0.010	0.045	-0.024	0.070	-0.012	0.059	-0.007	0.053	0.006	0.064	-0.011	0.062	-0.019	0.052	-0.024	0.053
NIST	-0.004	0.035	-0.017	0.064	0.006	0.051	0.000	0.045	0.013	0.059	0.004	0.054	-0.013	0.046	-0.018	0.047
NMIJ	-0.027	0.082	-0.040	0.098	0.028	0.090	-0.023	0.087	-0.010	0.095	0.027	0.092	-0.035	0.087	-0.040	0.088
NPL	0.003	0.026	-0.010	0.059	-0.002	0.044	0.007	0.038	0.020	0.054	-0.003	0.048	-0.005	0.039	-0.010	0.040
NRC	-0.008	0.035	-0.021	0.064	-0.010	0.052	-0.004	0.045	0.009	0.058	-0.008	0.056	-0.016	0.044	-0.021	0.045
PTB	0.003	0.035	-0.010	0.064	-0.002	0.051	0.007	0.045	0.020	0.059	-0.003	0.054	-0.005	0.046	-0.010	0.047
UME	0.006	0.073	-0.008	0.091	0.004	0.082	0.009	0.078	0.022	0.086	0.006	0.085	-0.003	0.078	-0.008	0.078
VNIIFTRI	-0.013	0.035	-0.027	0.064	-0.015	0.052	-0.010	0.045	0.003	0.058	-0.014	0.056	-0.022	0.044	-0.027	0.045
NPLI	0.005	0.073	-0.008	0.089	0.004	0.081	0.009	0.077	0.022	0.085	0.005	0.083	-0.003	0.077	-0.008	0.077
GUM	-0.004	0.049	-0.018	0.071	-0.006	0.060	-0.001	0.055	0.012	0.066	-0.005	0.063	-0.013	0.055	-0.018	0.056
DNDI "Systema"	-0.034	0.058	-0.048	0.078	-0.036	0.067	-0.031	0.063	-0.018	0.073	-0.035	0.070	-0.043	0.063	-0.048	0.064
VNIIFTRI	0.050	0.039	0.037	0.065	0.048	0.052	0.054	0.046	0.067	0.059	0.050	0.056	0.042	0.046	0.037	0.047
INM(RO)	0.018	0.044	0.005	0.068	0.016	0.056	0.022	0.050	0.035	0.063	0.018	0.059	0.010	0.051	0.005	0.051
INRIM	0.010	0.052														
BEV	0.006	0.030														
CMI	-0.035	0.060														
METAS	0.011	0.041														
CEM	-0.012	0.044														
MIKES	0.009	0.036														
SP	0.020	0.052														
KIM-LIPI	-0.01	0.09														

Not computed

Not computed

CCAUV.A-K3, COOMET.AUV.A-K3, EUROMET.AUV.A-K3, and APMP.AUV.A-K3.1

Frequency : 1000 Hz

Matrix of equivalence (unit is dB re 1 V/Pa) - continued

Lab *j* →

Lab <i>i</i> ↓																
	<i>D<sub>i</sub></i> / dB	<i>U<sub>i</sub></i> / dB	NIM		NIST		NMJJ		NPL		NRC		PTB		UME	
	<i>D<sub>ij</sub></i> / dB	<i>U<sub>ij</sub></i> / dB														
CENAM	0.013	0.052	0.024	0.070	0.017	0.064	0.040	0.098	0.010	0.059	0.021	0.064	0.010	0.064	0.008	0.091
NMIA	0.002	0.035	0.012	0.059	-0.006	0.051	-0.028	0.090	0.002	0.044	0.010	0.052	0.002	0.051	-0.004	0.082
DPLA	-0.004	0.025	0.007	0.053	0.000	0.045	0.023	0.087	-0.007	0.038	0.004	0.045	-0.007	0.045	-0.009	0.078
GUM	-0.017	0.045	-0.006	0.064	-0.013	0.059	0.010	0.095	-0.020	0.054	-0.009	0.058	-0.020	0.059	-0.022	0.086
INMETRO	0.000	0.040	0.011	0.062	-0.004	0.054	-0.027	0.092	0.003	0.048	0.008	0.056	0.003	0.054	-0.006	0.085
KRISS	0.008	0.026	0.019	0.052	0.013	0.046	0.035	0.087	0.005	0.039	0.016	0.044	0.005	0.046	0.003	0.078
LNE	0.013	0.027	0.024	0.053	0.018	0.047	0.040	0.088	0.010	0.040	0.021	0.045	0.010	0.047	0.008	0.078
NIM	-0.010	0.045			0.006	0.058	-0.016	0.094	0.014	0.052	-0.003	0.059	0.014	0.058	-0.016	0.087
NIST	-0.004	0.035	-0.006	0.058			0.023	0.091	-0.008	0.046	0.004	0.051	-0.008	0.052	-0.010	0.082
NMIJ	-0.027	0.082	0.016	0.094	-0.023	0.091			-0.030	0.087	-0.019	0.090	-0.030	0.091	-0.032	0.110
NPL	0.003	0.026	-0.014	0.052	0.008	0.046	0.030	0.087			0.011	0.044	0.000	0.046	-0.002	0.078
NRC	-0.008	0.035	0.003	0.059	-0.004	0.051	0.019	0.090	-0.011	0.044			0.011	0.051	-0.014	0.082
PTB	0.003	0.035	-0.014	0.058	0.008	0.052	0.030	0.091	0.000	0.046	-0.011	0.051			-0.002	0.082
UME	0.006	0.073	0.016	0.087	0.010	0.082	0.032	0.110	0.002	0.078	0.014	0.082	0.002	0.082		
VNIIFTRI	-0.013	0.035	-0.003	0.059	-0.009	0.051	0.013	0.090	-0.017	0.044	-0.006	0.052	-0.017	0.051	-0.019	0.082
NPLI	0.005	0.073	0.016	0.085	0.010	0.081	0.032	0.110	0.002	0.077	0.013	0.081	0.002	0.081	0.000	0.103
GUM	-0.004	0.049	0.006	0.066	0.000	0.060	0.022	0.096	-0.008	0.055	0.003	0.060	-0.008	0.060	-0.010	0.088
DNDI "Systema"	-0.034	0.058	-0.024	0.073	-0.030	0.068	-0.008	0.101	-0.038	0.063	-0.027	0.067	-0.038	0.068	-0.040	0.093
VNIIFTRI	0.050	0.039	0.060	0.059	0.054	0.052	0.077	0.091	0.047	0.046	0.058	0.052	0.047	0.052	0.044	0.082
INM(RO)	0.018	0.044	0.028	0.062	0.022	0.056	0.045	0.093	0.015	0.051	0.026	0.056	0.015	0.056	0.012	0.085
INRIM	0.010	0.052														
BEV	0.006	0.030														
CMI	-0.035	0.060														
METAS	0.011	0.041														
CEM	-0.012	0.044														
MIKES	0.009	0.036														
SP	0.020	0.052														
KIM-LIPI	-0.01	0.09														

Not computed

Not computed

**CCAUV.A-K3, COOMET.AUV.A-K3, EUROMET.AUV.A-K3, and APMP.AUV.A-K3.1**

**Frequency : 1000 Hz**

### **Matrix of equivalence (unit is dB re 1 V/Pa) - continued**

## Lab *j*

CCAUV.A-K3, COOMET.AUV.A-K3, EUROMET.AUV.A-K3, and APMP.AUV.A-K3.1

Frequency : 1000 Hz

Matrix of equivalence (unit is dB re 1 V/Pa) - continued

Lab *j* →

Lab <i>i</i> ↓			INRIM		BEV		CMI		METAS		CEM		MIKES		SP		
	<i>D<sub>i</sub></i> / dB	<i>U<sub>i</sub></i> / dB	<i>D<sub>ij</sub></i> / dB	<i>U<sub>ij</sub></i> / dB													
CENAM	0.013	0.052															
NMIA	0.002	0.035															
DPLA	-0.004	0.025															
GUM	-0.017	0.045															
INMETRO	0.000	0.040															
KRISS	0.008	0.026															
LNE	0.013	0.027															
NIM	-0.010	0.045															
NIST	-0.004	0.035															
NMIJ	-0.027	0.082															
NPL	0.003	0.026															
NRC	-0.008	0.035															
PTB	0.003	0.035															
UME	0.006	0.073															
VNIIFTRI	-0.013	0.035															
NPLI	0.005	0.073															
GUM	-0.004	0.049															
DNDI "Systema"	-0.034	0.058															
VNIIFTRI	0.050	0.039															
INM(RO)	0.018	0.044															
INRIM	0.010	0.052			0.004	0.050	0.045	0.072	-0.001	0.057	0.022	0.059	0.001	0.054	-0.010	0.065	
BEV	0.006	0.030	-0.004	0.050			0.041	0.058	-0.006	0.038	0.018	0.041	-0.003	0.033	-0.014	0.050	
CMI	-0.035	0.060	-0.045	0.072	-0.041	0.058			-0.047	0.065	-0.023	0.066	-0.044	0.062	-0.055	0.072	
METAS	0.011	0.041	0.001	0.057	0.006	0.038	0.047	0.065			0.023	0.050	0.002	0.043	-0.009	0.057	
CEM	-0.012	0.044	-0.022	0.059	-0.018	0.041	0.023	0.066	-0.023	0.050			-0.021	0.046	-0.032	0.059	
MIKES	0.009	0.036	-0.001	0.054	0.003	0.033	0.044	0.062	-0.002	0.043	0.021	0.046		-0.011	0.054		
SP	0.020	0.052	0.010	0.065	0.014	0.050	0.055	0.072	0.009	0.057	0.032	0.059	0.011	0.054			
KIM-LIPI	-0.01	0.09															

Not computed

CCAUV.A-K3, COOMET.AUV.A-K3, EUROMET.AUV.A-K3, APMP.AUV.A-K3.1, and APMP.AUV.A-K3

MEASURAND : Pressure sensitivity level of laboratory standard microphone type LS2P

FREQUENCIES: 250 Hz and 1000 Hz

Degrees of equivalence relative to the key comparison reference values (unit is dB re 1 V/Pa)

Lab $i$	Frequency 250 Hz	
	$D_i$ / dB	$U_i$ / dB
CENAM	0.014	0.052
NMIA	0.004	0.035
DPLA	-0.004	0.025
GUM	-0.016	0.045
INMETRO	0.001	0.040
KRISS	0.008	0.026
LNE	0.016	0.026
NIM	-0.009	0.045
NIST	-0.001	0.035
NMIJ	-0.016	0.082
NPL	-0.006	0.026
NRC	-0.006	0.035
PTB	0.004	0.035
UME	0.007	0.073
VNIIFTRI	-0.016	0.035
NPLI	0.015	0.073
GUM	-0.010	0.049
DNDI "Systema"	-0.040	0.067
VNIIFTRI	0.052	0.039
INM(RO)	0.018	0.044

	Frequency 250 Hz	
	$D_i$ / dB	$U_i$ / dB
INRIM	0.020	0.052
BEV	0.006	0.030
CMI	-0.040	0.060
METAS	0.018	0.041
CEM	-0.011	0.044
MIKES	0.009	0.033
SP	0.018	0.052
KIM-LIPI	0.00	0.09
NIMT	0.02	0.04
CMS/ITRI	0.01	0.04
NMIA	0.00	0.04
NPLI	-0.02	0.05
SCL	-0.01	0.04
NML-SIRIM	0.03	0.04
NMIJ	-0.01	0.05
NIM	-0.01	0.05
NMC, A*STAR	0.01	0.04
KRISS	0.01	0.04

	Frequency 1000 Hz	
	$D_i$ / dB	$U_i$ / dB
CENAM	0.013	0.052
NMIA	0.002	0.035
DPLA	-0.004	0.025
GUM	-0.017	0.045
INMETRO	0.000	0.040
KRISS	0.008	0.026
LNE	0.013	0.027
NIM	-0.010	0.045
NIST	-0.004	0.035
NMIJ	-0.027	0.082
NPL	0.003	0.026
NRC	-0.008	0.035
PTB	0.003	0.035
UME	0.006	0.073
VNIIFTRI	-0.013	0.035
NPLI	0.005	0.073
GUM	-0.004	0.049
DNDI "Systema"	-0.034	0.058
VNIIFTRI	0.050	0.039
INM(RO)	0.018	0.044

	Frequency 1000 Hz	
	$D_i$ / dB	$U_i$ / dB
INRIM	0.010	0.052
BEV	0.006	0.030
CMI	-0.035	0.060
METAS	0.011	0.041
CEM	-0.012	0.044
MIKES	0.009	0.036
SP	0.020	0.052
KIM-LIPI	-0.01	0.09
NIMT	0.02	0.04
CMS/ITRI	0.01	0.04
NMIA	-0.01	0.04
NPLI	-0.01	0.05
SCL	-0.01	0.04
NML-SIRIM	0.03	0.04
NMIJ	0.00	0.05
NIM	-0.01	0.05
NMC, A*STAR	0.01	0.04
KRISS	0.01	0.04

Black: participants in CCAUV.A-K3

Green: participants in COOMET.AUV.A-K3

Blue: participants in EUROMET.AUV.A-K3

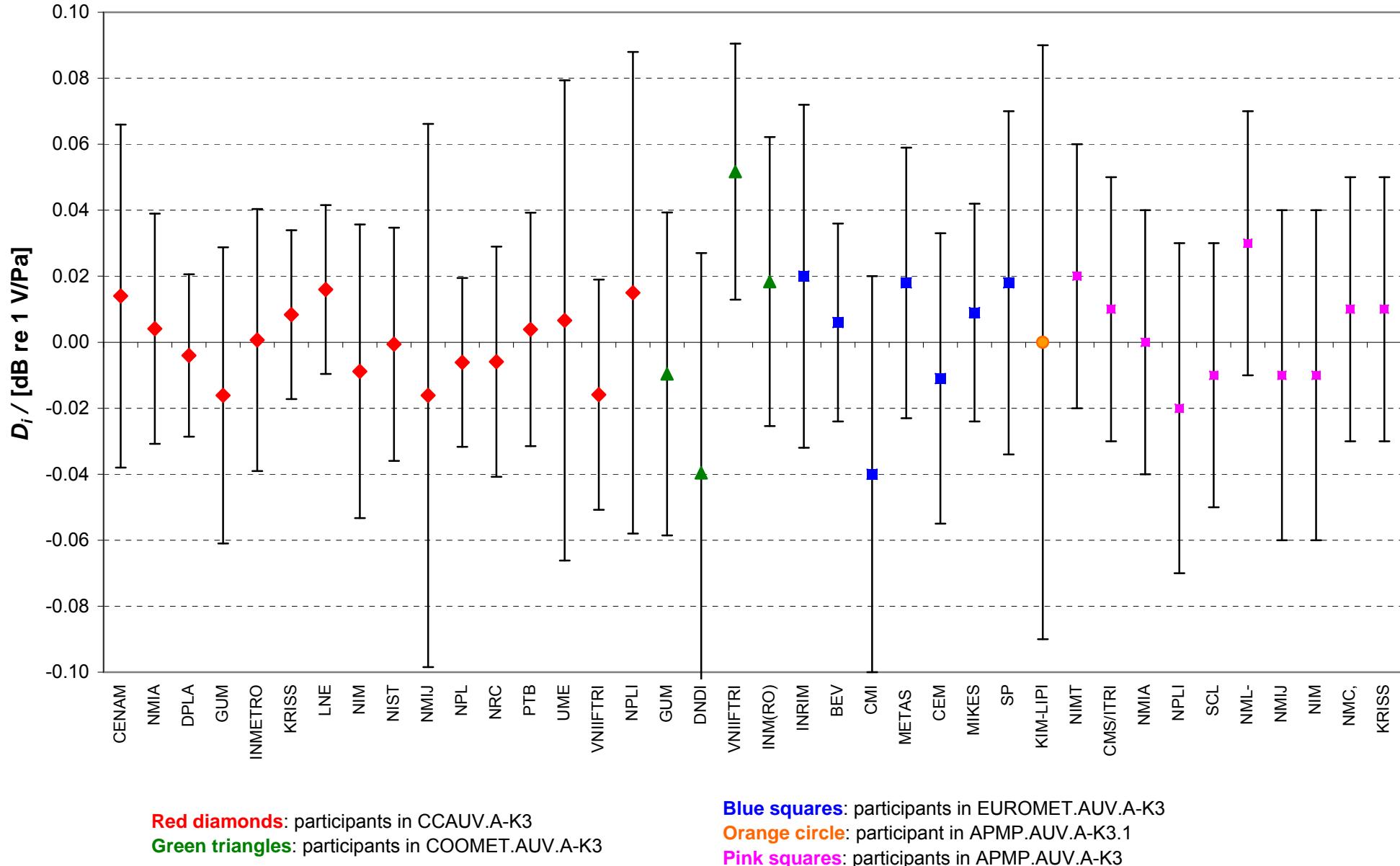
Orange: participant in APMP.AUV.A-K3.1

Pink: participants in APMP.AUV.A-K3

**CCAUV.A-K3, COOMET.AUV.A-K3, EUROMET.AUV.A-K3, APMP.AUV.A-K3.1, and APMP.AUV.A-K3**

Microphone LS2P, frequency 250 Hz

Degrees of equivalence [ $D_i$  and its expanded uncertainty  $U_i$  ( $k = 2$ )]



**CCAUV.A-K3, COOMET.AUV.A-K3, EUROMET.AUV.A-K3, APMP.AUV.A-K3.1, and APMP.AUV.A-K3**

Microphone LS2P, frequency 1000 Hz

Degrees of equivalence [ $D_i$  and its expanded uncertainty  $U_i$  ( $k = 2$ )]

