Key Comparison CCEM-K7:
AC Voltage Ratio
Draft B Report Version I
Part 2: Results

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1 Analysis

1.1 Measurements

Measurements were made of 20 ac voltage ratios at two possible frequencies: 1 kHz and 55 Hz. The In-Phase and Quadrature components of each voltage ratio were reported separately giving a total of 80 possible measurement results for each participant. The 1 kHz measurements were compulsory and all the 17 participating laboratories made these measurements. The 55 Hz measurements were optional, with 7 Laboratories contributing. Each participant submitted a text file containing the results of the measurements in an agreed format. The data from these files is shown in the tables in section 4. The text files were processed by a series of programs resulting in the production of Part 2 of the comparison report. The programs extracted the appropriate measurement data from the files provided by each laboratory and produced 80 measurement files, each corresponding to a particular frequency, ratio and phase; these were then analysed separately using the method recommended in [1]. Expanded uncertainties ($k = 2$) are used throughout the document unless stated in the text.

1.2 Transport Uncertainty

The comparison was organised in form known as a "star-shape" where the travelling standard returned to the pilot laboratory (NPL) between the measurements made by the participants. Measurements of the travelling standard at 1 kHz were made at each time that it was returned to NPL and these measurements were used to make an estimate of the uncertainty associated with its transport between laboratories. The travelling standard was constructed to remain stable with time [3] and tests, made before the start of the comparison, confirmed that, whilst in its packing container, it was immune to moderate mishandling.

The combined standard uncertainty of the NPL measurements is much higher than the expected transport uncertainty of the standard but, as the NPL reference dividers were not disturbed during the comparison, the type B uncertainties associated with the system can be assumed to be constant and the type A uncertainties can be reduced by combining the measurements of a number of ratios of the standard. Under these circumstances no attempt has been made to assess the drift of the travelling standard.

The uncertainties were derived by first calculating the mean value of the time series for each component of each ratio and subtracting the calculated means from the values in the appropriate time series. This eliminates the individual values of the ratios allowing them to be combined to reduce the uncertainty component due to the measurement of an individual ratio. The resulting values are given in Tables 1 to 4 and plotted in Figures 1 to 4. The mean of each set of ratios, measured at a specific time, was taken and the standard deviation of these mean values was taken as the transport uncertainty. The standard uncertainties due to transport are given in the table below. The in-phase and quadrature values shown for the decimal and elevenths rations are consistent and so, were further combined, to give the two transport standard uncertainties, shown in the row labelled "Combined", which are used in the calculation of the KCRV for both the 1 kHz and 55 Hz results.

	InPhase	Quadrature	Degrees of Freedom
Decimal	5.8×10^{-9}	2.3×10^{-9}	15
Elevenths	7.5×10^{-9}	3.1×10^{-9}	12
Combined (u_t)	6.4×10^{-9}	2.6×10^{-9}	28

The uncertainties used to calculate the KCRV and u(KCRV) are calculated by combining the expanded uncertainty U_i and k-value k_i, provided by each laboratory, with the appropriate standard uncertainty due to transport u_t using a quadrature sum to give an augmented standard uncertainty u_i where $u_i^2 = (U_i/k_i)^2 + u_t^2$.

1.3   Measurement Processing

A weighted mean of the results in each set of measurements was calculated using $1/u_i^2$ as the weight, where u_i is the augmented standard uncertainty of the measurement from laboratory i.

A χ^2 test against the 95% quantile of the appropriate χ^2 distribution revealed that the majority of the measurement sets contained data which was not consistent with the calculated mean. This situation was rectified by eliminating the result with the greatest contribution to the observed χ^2 value from the subset of measurements used to determine the mean, this procedure was repeated until the χ^2 test was satisfied and the corresponding mean was used as the Key Comparison Reference Value (KCRV). In general a consistent set could be generated with a modest reduction, on average 20%, in the degrees of freedom ν but, at the extremes, the smallest number of degrees of freedom remaining in the 1 kHz measurements was 9 out of a maximum of 16 and for the 55 Hz measurements this was 3 out of a maximum of 6. The results of this process are shown in Table 5 for 1 kHz and Table 6 for 55 Hz.

The column ν_i shows the degrees of freedom associated with the weighted mean of all the participants.

The column χ_i^2 shows the initial value of χ^2 arising from the weighted mean of all the participants.

The column ν_r shows the degrees of freedom remaining after the elimination process.

The column χ_r^2 shows the value of χ^2 after the elimination process.

The column χ_{lim}^2 shows the value of the 95% quantile of the χ^2 distribution with ν_r degrees of freedom.

The final column shows the results eliminated from the calculation of the mean, in order of elimination.

The effects of the elimination process on the calculated mean are tabulated and plotted in Tables 7-14 and in Figures 5-12. For clarity in the plots, a small horizontal offset has been applied to the values of the nominal ratio for points other than the reported Key Comparison Reference Values (KCRVs). The vertical span of all eight plots has been set to $\pm 30 \times 10^{-9}$ to aid comparison. This choice of scale forces some points to lie off scale and are therefore not plotted, but appear in the associated tables. In each table:

The second column is numerically equal to the reported KCRV.

The third column represents the weighted mean with no eliminations minus the value in the second column.

The fourth column is the KCRV minus the value in the second column.

The fifth column is the weighted mean, calculated by the further elimination of NMIA from the set used to calculate the KCRV, minus the value in the second column. NMIA is the laboratory reporting the smallest uncertainty in all the measurements and therefore has the greatest effect on the KCRV. This column shows the effect of removing it from the calculation of the KCRV.

The values from the last three columns are plotted in the graph above the table.

1.4 Largest Consistent Subset

The successive elimination procedure described above was checked using the technique described in [2], to find the Largest Consistent Subset (LCS). The checks were made prior to the calculation of the transport uncertainties and so both techniques were applied using only the uncertainties supplied by the participants. In 75 of the 80 cases, the LCS technique produced an identical subset to the successive elimination procedure. The remaining 5 cases were due to the low uncertainty quoted by NMIA the elimination of which could give a large change in χ^2. The inclusion of the transport uncertainties have significantly decreased this effect and the existing successive elimination algorithm was used to generate the subset used to calculate the KCRV using the augmented uncertainties.

1.5 Measurements

The Degree of Equivalence (DOE) of each laboratory to the KCRV is shown in the graphs and tables following page 25. Solid (green) circles denote results that were included in the calculation of the KCRV while solid (blue) squares denote excluded results. For clarity, some results are shown off scale. It should be noted that these results can contribute to the KCRV (usually when the absolute value of the result and its associated uncertainty are similar). The raw data tables for each laboratory are included in section 4, after the measurement graphs and tables.

2 Acknowledgements

The authors would like to thank Professor Maurice Cox, who provided advice, calculated the Largest Consistent Subsets of the measurement data and carried out an ANOVA analysis to aid the calculation of the transport uncertainties.

References

[1] M. G. Cox. The evaluation of key comparison data. *Metrologia*, 39:589–595, 2002.

[2] M. G. Cox. The evaluation of key comparison data: determining the largest consistent subset. *Metrologia*, 44:187–200, 2007.

[3] J.R. Fiander and G.W. Small. An inductive voltage divider for international comparisons. In *2000 Conference on Precision Electromagnetic Measurements Digest*, pages 224 –225, 2000.
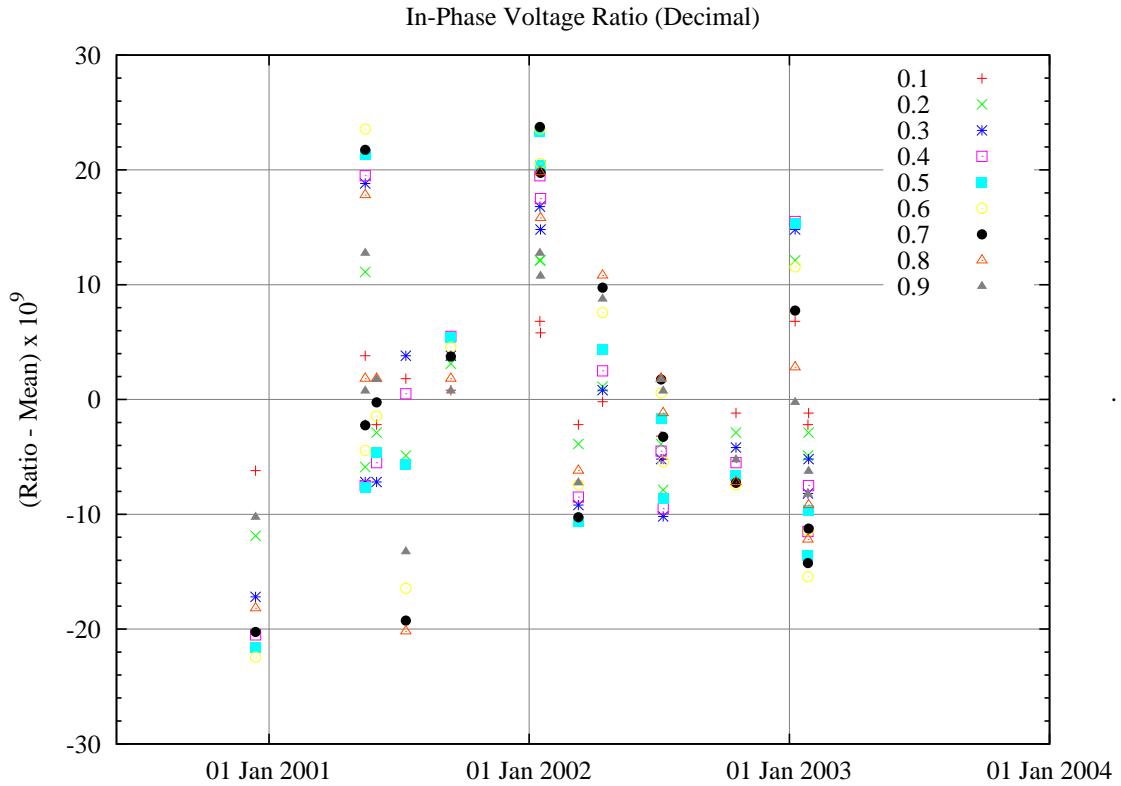
Figure 1: Decimal ratios - in-phase measurements at 1 kHz

Date	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9
13/12/2000	-6.2	-11.9	-17.2	-20.5	-21.6	-22.4	-20.2	-18.2	-10.2
16/05/2001	3.8	11.1	18.8	19.5	21.4	23.6	21.8	17.8	12.8
16/05/2001	-2.2	-5.9	-7.2	-7.5	-7.6	-4.4	-2.2	1.8	0.8
01/06/2001	-2.2	-2.9	-7.2	-5.5	-4.6	-1.4	-0.2	1.8	1.8
12/07/2001	1.8	-4.9	3.8	0.5	-5.6	-16.4	-19.2	-20.2	-13.2
13/09/2001	0.8	3.1	3.8	5.5	5.4	4.6	3.8	1.8	0.8
16/01/2002	6.8	12.1	16.8	19.5	23.4	23.6	23.8	19.8	12.8
17/01/2002	5.8	12.1	14.8	17.5	20.4	20.6	19.8	15.8	10.8
11/03/2002	-2.2	-3.9	-9.2	-8.5	-10.6	-7.4	-10.2	-6.2	-7.2
14/04/2002	-0.2	1.1	0.8	2.5	4.4	7.6	9.8	10.8	8.8
05/07/2002	-3.2	-3.9	-5.2	-4.5	-1.6	0.6	1.8	1.8	1.8
08/07/2002	-5.2	-7.9	-10.2	-9.5	-8.6	-5.4	-3.2	-1.2	0.8
18/10/2002	-1.2	-2.9	-4.2	-5.5	-6.6	-7.4	-7.2	-7.2	-5.2
09/01/2003	6.8	12.1	14.8	15.5	15.4	11.6	7.8	2.8	-0.2
27/01/2003	-2.2	-4.9	-8.2	-11.5	-13.6	-15.4	-14.2	-12.2	-8.2
28/01/2003	-1.2	-2.9	-5.2	-7.5	-9.6	-11.4	-11.2	-9.2	-6.2

Table 1: Pilot Laboratory measurements In-Phase at 1 kHz
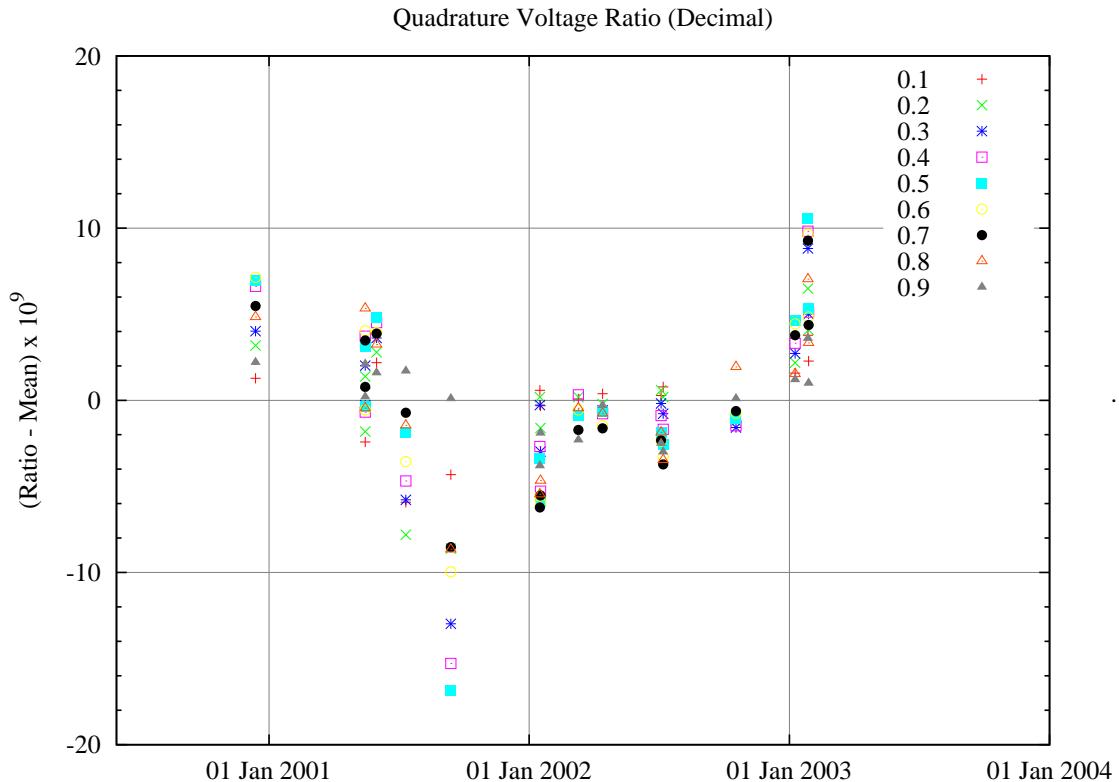
Figure 2: Decimal ratios - Quadrature measurements at 1 kHz

Date	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9
13/12/2000	1.3	3.2	4.0	6.6	6.9	7.1	5.5	4.8	2.2
16/05/2001	−2.4	−1.8	−0.3	−0.7	−0.4	−0.6	0.8	−0.5	0.2
16/05/2001	0.7	1.4	2.0	3.7	3.1	4.0	3.5	5.3	2.1
01/06/2001	2.2	2.8	3.6	4.5	4.8	3.9	3.9	3.2	1.6
12/07/2001	−5.9	−7.8	−5.8	−4.7	−1.9	−3.6	−0.7	−1.5	1.7
13/09/2001	−4.3	−8.6	−13.0	−15.3	−16.9	−10.0	−8.5	−8.7	0.1
16/01/2002	0.6	0.2	−0.3	−2.7	−3.4	−5.6	−6.2	−5.5	−3.8
17/01/2002	−0.3	−1.6	−3.0	−5.3	−5.9	−6.0	−5.5	−4.7	−1.9
11/03/2002	0.1	0.2	−0.8	0.3	−0.9	−0.6	−1.7	−0.5	−2.3
14/04/2002	0.4	−0.2	−0.6	−0.8	−0.7	−1.5	−1.6	−0.8	−0.3
05/07/2002	0.3	0.6	−0.2	−0.9	−1.9	−2.4	−2.3	−1.9	−2.5
08/07/2002	0.8	0.2	−0.8	−1.7	−2.6	−3.3	−3.7	−3.5	−3.0
18/10/2002	−0.9	−1.2	−1.6	−1.5	−1.1	−0.8	−0.6	1.9	0.1
09/01/2003	1.6	2.2	2.7	3.3	4.6	4.4	3.8	1.5	1.2
27/01/2003	3.8	6.5	8.8	9.8	10.5	9.6	9.3	7.0	3.6
28/01/2003	2.3	4.1	5.0	5.1	5.3	4.8	4.4	3.3	1.0

Table 2: Pilot Laboratory measurements Quadrature at 1 kHz
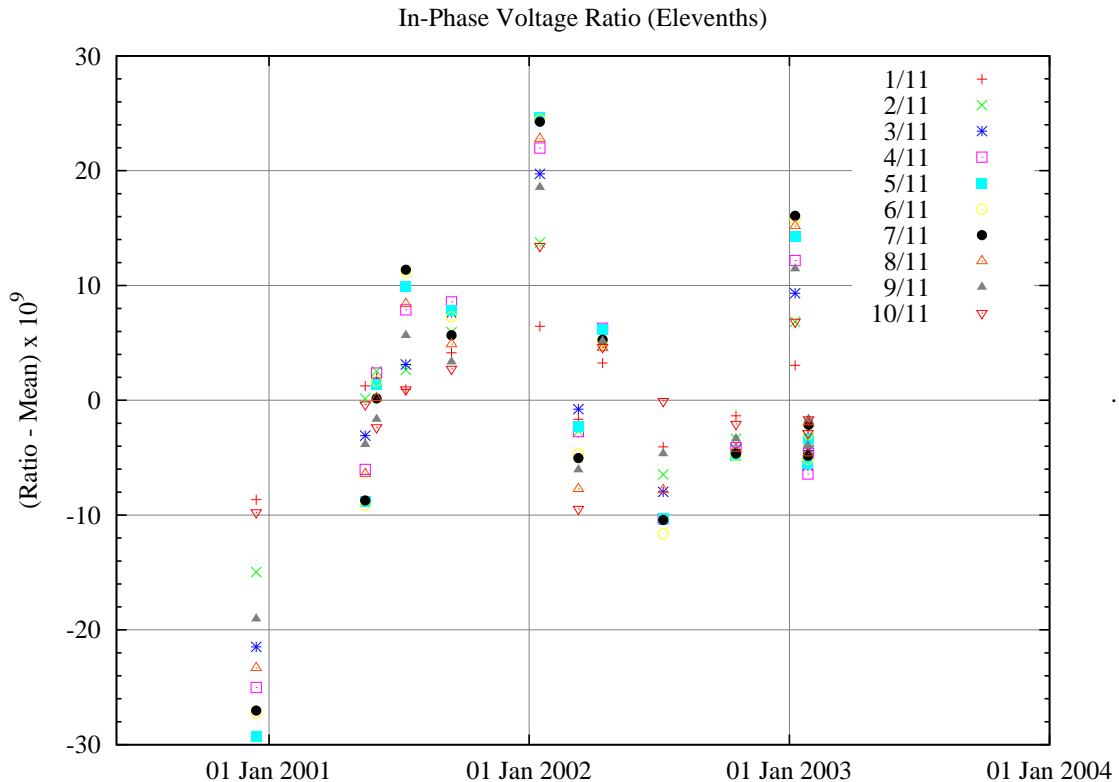
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In-Phase Voltage Ratio (Elevenths)

Figure 3: Elevenths - in-phase measurements at 1 kHz

Date	1/11	2/11	3/11	4/11	5/11	6/11	7/11	8/11	9/11	10/11
14/12/2000	−8.7	−15.0	−21.5	−25.0	−29.3	−27.2	−27.0	−23.3	−19.0	−9.8
16/05/2001	1.2	0.1	−3.1	−6.0	−8.8	−9.1	−8.7	−6.4	−3.8	−0.4
01/06/2001	1.9	2.5	1.6	2.4	1.4	1.7	0.2	0.2	−1.6	−2.4
12/07/2001	0.9	2.6	3.1	7.9	9.9	11.2	11.4	8.4	5.7	0.9
14/09/2001	4.1	5.9	7.6	8.6	7.8	7.3	5.7	4.9	3.4	2.7
16/01/2002	6.4	13.7	19.7	22.0	24.6	24.5	24.3	22.8	18.6	13.4
11/03/2002	−1.7	−2.7	−0.8	−2.7	−2.3	−4.6	−5.0	−7.7	−6.0	−9.5
14/04/2002	3.2	4.8	6.2	6.3	6.2	5.2	5.3	4.6	5.2	4.6
08/07/2002	−4.1	−6.5	−8.0	−10.3	−10.3	−11.6	−10.4	−7.8	−4.6	−0.1
18/10/2002	−1.4	−3.4	−4.3	−4.1	−4.8	−4.8	−4.6	−4.2	−3.3	−2.1
09/01/2003	3.0	6.8	9.3	12.2	14.3	15.8	16.1	15.2	11.5	6.8
27/01/2003	−3.1	−5.1	−5.7	−6.4	−5.5	−5.1	−4.8	−4.6	−3.9	−2.9
28/01/2003	−2.3	−4.2	−4.4	−4.6	−3.3	−2.9	−2.1	−1.9	−1.6	−1.7

Table 3: Pilot Laboratory measurements In-Phase at 1 kHz
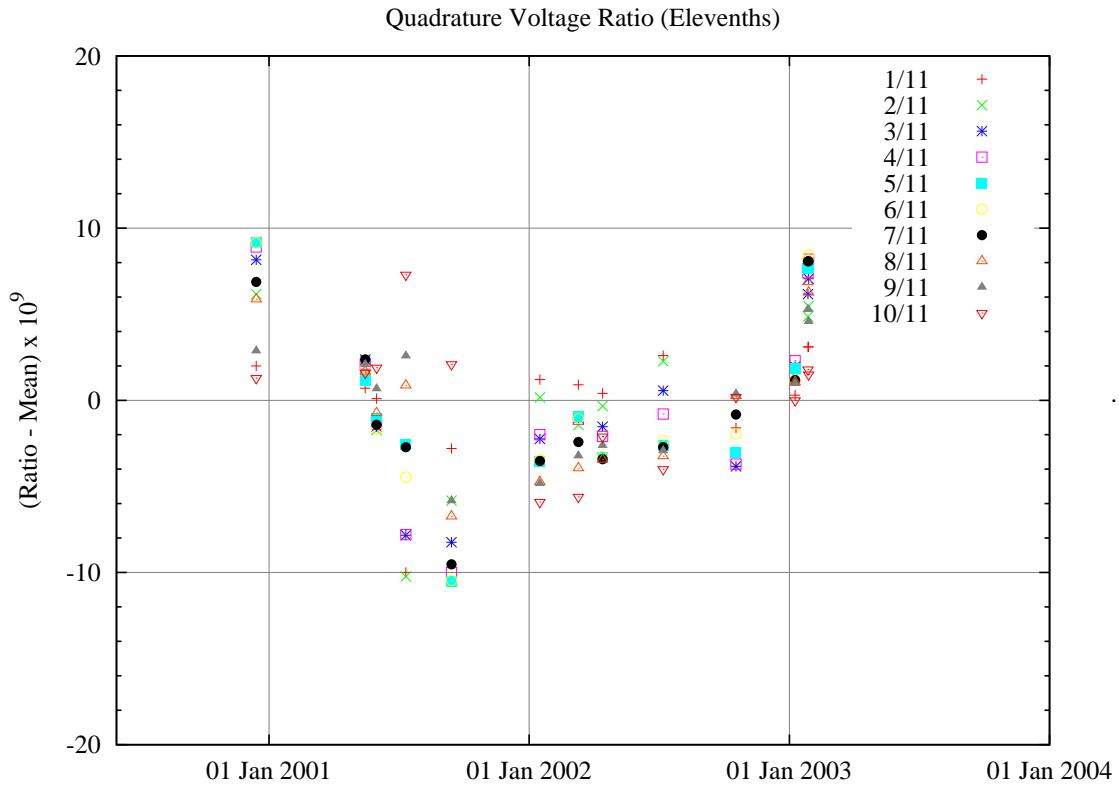
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Quadrature Voltage Ratio (Elevenths)

Figure 4: Elevenths - Quadrature measurements at 1 kHz

Date	1/11	2/11	3/11	4/11	5/11	6/11	7/11	8/11	9/11	10/11
14/12/2000	2.0	6.2	8.2	8.9	9.2	9.1	6.9	5.9	2.9	1.3
16/05/2001	0.7	2.3	2.4	2.1	1.2	1.8	2.4	1.7	2.1	1.6
01/06/2001	0.1	−1.7	−1.5	−1.4	−1.0	−1.7	−1.4	−0.7	0.7	1.9
12/07/2001	−10.0	−10.2	−7.8	−7.8	−2.5	−4.5	−2.7	0.9	2.6	7.3
14/09/2001	−2.8	−5.8	−8.2	−10.0	−10.5	−10.5	−9.5	−6.7	−5.8	2.1
16/01/2002	1.2	0.2	−2.2	−2.0	−3.5	−3.5	−3.5	−4.7	−4.8	−5.9
11/03/2002	0.9	−1.4	−1.0	−1.1	−0.9	−1.1	−2.4	−3.9	−3.2	−5.6
14/04/2002	0.4	−0.3	−1.5	−2.1	−3.3	−3.3	−3.4	−3.4	−2.6	−2.1
08/07/2002	2.6	2.3	0.6	−0.8	−2.6	−2.4	−2.7	−3.2	−2.9	−4.0
18/10/2002	−1.6	−3.0	−3.8	−3.7	−3.0	−2.0	−0.8	0.3	0.4	0.2
09/01/2003	0.3	1.4	2.0	2.3	1.9	1.1	1.2	1.1	1.0	−0.0
27/01/2003	3.1	4.9	6.2	7.4	7.7	8.1	8.1	6.9	5.3	1.8
28/01/2003	3.1	5.5	7.1	8.2	7.9	8.4	8.1	6.3	4.6	1.5

Table 4: Pilot Laboratory measurements Quadrature at 1 kHz

Ratio	Phase	ν_i	χ_i^2	ν_r	χ_r^2	χ_{lim}^2	Results excluded
0.9	In-Phase	16	51	15	15	25	LCIE
0.9	Quadrature	16	385683	14	15	24	LCIE, NPLI
0.8	In-Phase	16	91	15	19	25	LCIE
0.8	Quadrature	16	659655	13	20	22	LCIE, NPLI, VSL
0.7	In-Phase	16	111	14	17	24	LCIE, NPLI
0.7	Quadrature	16	431565	11	19	20	LCIE, NPLI, VSL, NRC, IEN
0.6	In-Phase	16	117	14	14	24	LCIE, NPLI
0.6	Quadrature	16	184726	11	16	20	LCIE, NPLI, NRC, VSL, PTB
0.5	In-Phase	16	44	15	24	25	NPLI
0.5	Quadrature	16	35935	10	12	18	LCIE, NPLI, NRC, VSL, NIM, PTB
0.4	In-Phase	16	38	15	20	25	NPLI
0.4	Quadrature	16	18128	11	15	20	LCIE, NPLI, NIM, VSL, NRC
0.3	In-Phase	16	76	15	19	25	LCIE
0.3	Quadrature	16	199390	11	17	20	LCIE, NPLI, NIM, VSL, NRC
0.2	In-Phase	16	43	15	11	25	LCIE
0.2	Quadrature	16	444141	13	18	22	LCIE, NPLI, NIM
0.1	In-Phase	16	6	16	6	26	
0.1	Quadrature	16	347518	14	11	24	LCIE, NPLI
0.01	In-Phase	16	76713	11	17	20	LCIE, NRC, NPLI, VSL, KRISS
0.01	Quadrature	16	9213	10	12	18	LCIE, NRC, UME, NPLI, NIM, IEN
10/11	In-Phase	16	57	15	16	25	LCIE
10/11	Quadrature	16	1031	14	12	24	LCIE, NPLI
9/11	In-Phase	16	214	15	10	25	LCIE
9/11	Quadrature	16	2387	13	19	22	LCIE, NPLI, NRC
8/11	In-Phase	16	275	15	7	25	LCIE
8/11	Quadrature	16	2914	11	17	20	LCIE, NPLI, NRC, VSL, PTB
7/11	In-Phase	16	231	15	15	25	LCIE
7/11	Quadrature	16	2781	10	17	18	NPLI, LCIE, VSL, NRC, PTB, IEN
6/11	In-Phase	16	96	15	13	25	LCIE
6/11	Quadrature	16	2350	10	16	18	NPLI, LCIE, VSL, NRC, PTB, KRISS
5/11	In-Phase	16	16	16	16	26	
5/11	Quadrature	16	1645	9	12	17	NPLI, LCIE, VSL, NRC, PTB, NIM, KRISS
4/11	In-Phase	16	54	15	14	25	LCIE
4/11	Quadrature	16	1166	12	19	21	NPLI, VSL, NRC, LCIE
3/11	In-Phase	16	159	15	13	25	LCIE
3/11	Quadrature	16	1041	13	21	22	NPLI, LCIE, VSL
2/11	In-Phase	16	98	15	12	25	LCIE
2/11	Quadrature	16	779	13	20	22	LCIE, NPLI, NIM
1/11	In-Phase	16	18	16	18	26	
1/11	Quadrature	16	75775	14	12	24	LCIE, NPLI

Table 5: Evaluation of consistent subsets for measurements at 1 kHz

Ratio	Phase	ν_i	χ_i^2	ν_r	χ_r^2	χ_{lim}^2	Results excluded
0.9	In-Phase	6	13	5	3	11	NIM
0.9	Quadrature	6	2704	5	1	11	NPLI
0.8	In-Phase	6	21	5	2	11	NIM
0.8	Quadrature	6	8470	5	6	11	NPLI
0.7	In-Phase	6	12	6	12	13	
0.7	Quadrature	6	14151	5	9	11	NPLI
0.6	In-Phase	6	17	5	7	11	NIM
0.6	Quadrature	6	17275	4	2	9	NPLI, NIM
0.5	In-Phase	6	19	5	4	11	NIM
0.5	Quadrature	6	17417	5	3	11	NPLI
0.4	In-Phase	6	9	6	9	13	
0.4	Quadrature	6	13948	5	8	11	NPLI
0.3	In-Phase	6	25	5	6	11	NIM
0.3	Quadrature	6	9534	4	2	9	NPLI, NIM
0.2	In-Phase	6	19	5	4	11	NIM
0.2	Quadrature	6	5063	4	2	9	NPLI, NIM
0.1	In-Phase	6	12	6	12	13	
0.1	Quadrature	6	1388	4	1	9	NPLI, NIM
0.01	In-Phase	6	11111	4	4	9	NPLI, NIM
0.01	Quadrature	6	33215	3	8	8	NIM, PTB, NPLI
10/11	In-Phase	6	127	4	0	9	NIM, NPLI
10/11	Quadrature	6	21	5	2	11	NIM
9/11	In-Phase	6	49	4	0	9	NPLI, NIM
9/11	Quadrature	6	8	6	8	13	
8/11	In-Phase	6	40	5	6	11	NPLI
8/11	Quadrature	6	9	6	9	13	
7/11	In-Phase	6	20	5	5	11	NPLI
7/11	Quadrature	6	11	6	11	13	
6/11	In-Phase	6	6	6	6	13	
6/11	Quadrature	6	15	5	4	11	NPLI
5/11	In-Phase	6	8	6	8	13	
5/11	Quadrature	6	10	6	10	13	
4/11	In-Phase	6	20	5	8	11	NIM
4/11	Quadrature	6	92	4	6	9	NIM, NPLI
3/11	In-Phase	6	16	5	6	11	NPLI
3/11	Quadrature	6	86	4	6	9	NIM, NPLI
2/11	In-Phase	6	77	4	2	9	NIM, NPLI
2/11	Quadrature	6	124	4	8	9	NIM, NPLI
1/11	In-Phase	6	55	4	2	9	NPLI, NIM
1/11	Quadrature	6	157	4	6	9	NIM, NPLI

Table 6: Evaluation of consistent subsets for measurements at 55 Hz

1 kHz, In-Phase Voltage Ratio (Decimal)
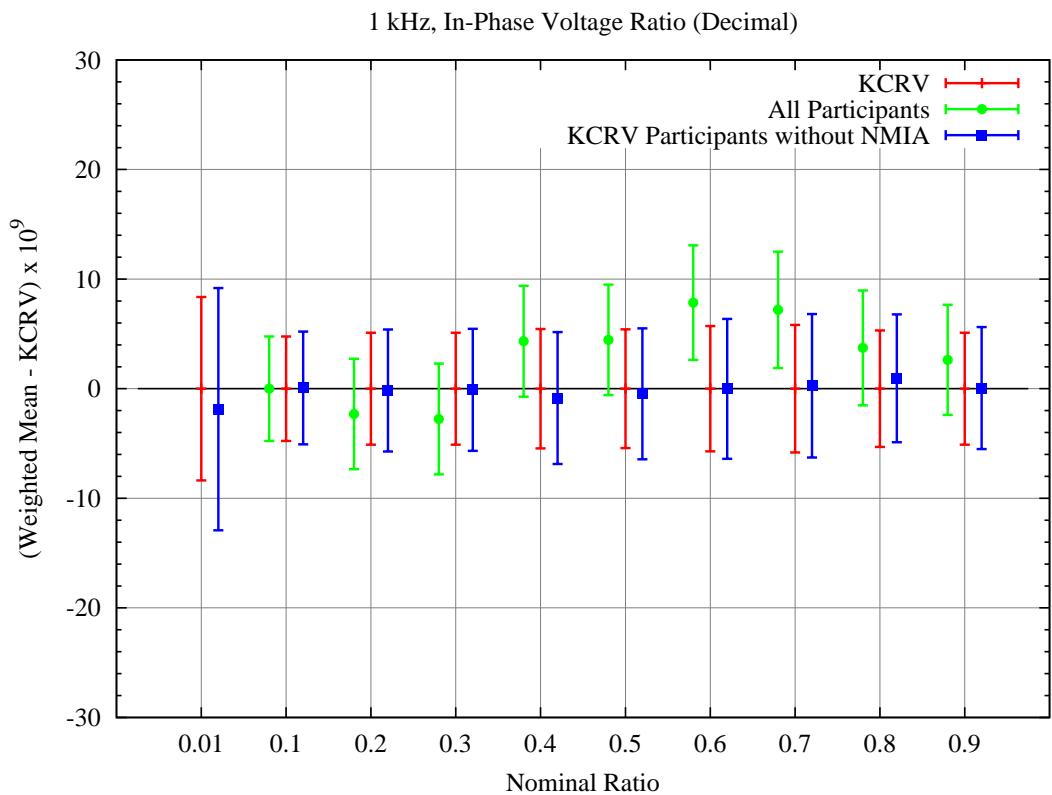
Figure 5: Decimal ratios - in-phase measurements at 1 kHz

Ratio	KCRV	Result - KCRV		
		All Participants	KCRV	KCRV without NMIA
0.9	58.3	2.6 ± 5.0	0.0 ± 5.1	0 ± 6
0.8	71.5	3.7 ± 5.2	0.0 ± 5.3	1 ± 6
0.7	64.0	7.2 ± 5.3	0.0 ± 5.8	0 ± 7
0.6	39.0	7.9 ± 5.2	0.0 ± 5.7	−0 ± 6
0.5	9.8	4.5 ± 5.0	0.0 ± 5.4	−0 ± 6
0.4	−22.9	4.3 ± 5.1	0.0 ± 5.4	−1 ± 6
0.3	−38.6	−2.8 ± 5.1	0.0 ± 5.1	−0 ± 6
0.2	−45.9	−2.3 ± 5.0	0.0 ± 5.1	−0 ± 6
0.1	−43.6	0.0 ± 4.8	0.0 ± 4.8	0 ± 5
0.01	−1160.5	340.6 ± 6.2	0.0 ± 8.4	−2 ± 11

Table 7: In-Phase measurements at 1 kHz (Decimal)
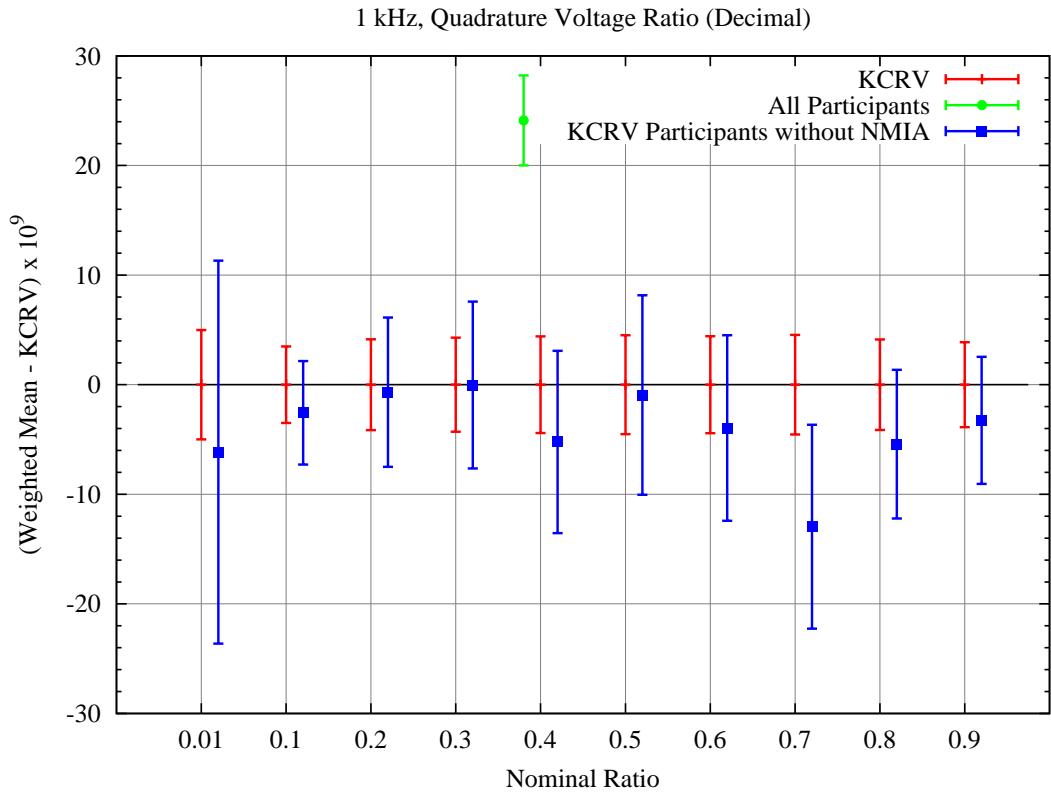
Figure 6: Decimal ratios - quadrature measurements at 1 kHz

Ratio	KCRV	Result - KCRV			
		All Participants		KCRV	KCRV without NMIA
0.9	−71.6	−174.1 ± 3.8		0.0 ± 3.9	−3 ± 6
0.8	−110.2	−233.6 ± 4.1		0.0 ± 4.1	−5 ± 7
0.7	−137.0	−177.8 ± 4.2		0.0 ± 4.5	−13 ± 9
0.6	−132.5	−114.1 ± 4.3		0.0 ± 4.4	−4 ± 8
0.5	−130.3	−49.8 ± 4.2		0.0 ± 4.5	−1 ± 9
0.4	−97.0	24.1 ± 4.1		0.0 ± 4.4	−5 ± 8
0.3	−51.0	92.7 ± 3.9		0.0 ± 4.3	−0 ± 8
0.2	−15.4	157.6 ± 3.8		0.0 ± 4.1	−1 ± 7
0.1	8.9	134.3 ± 3.5		0.0 ± 3.5	−3 ± 5
0.01	422.5	44.4 ± 4.1		0.0 ± 5.0	−6 ± 17

Table 8: Quadrature measurements at 1 kHz (Decimal)

1 kHz, In-Phase Voltage Ratio (Elevenths)
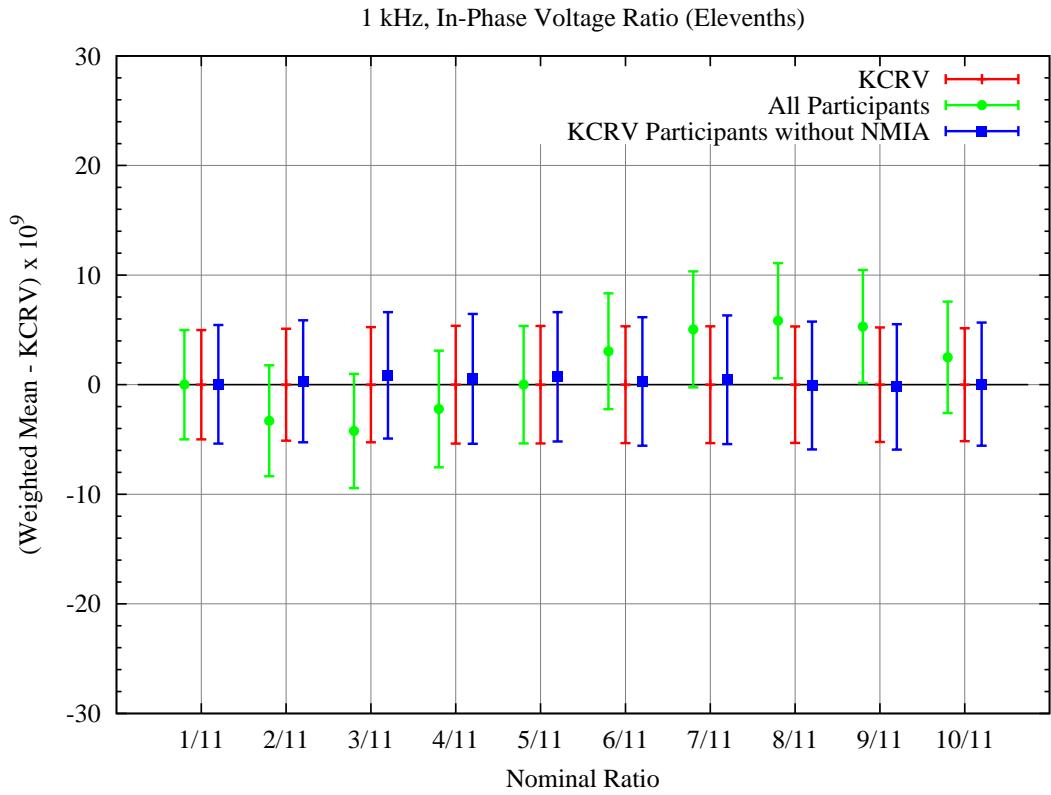
Figure 7: Elevenths - in-phase measurements at 1 kHz

| Ratio | KCRV | Result - KCRV | | |
		All Participants	KCRV	KCRV without NMIA
10/11	53.2	2.5 $\pm$ 5.1	0.0 $\pm$ 5.1	0 $\pm$ 6
9/11	21.8	5.3 $\pm$ 5.2	0.0 $\pm$ 5.2	$-0 \pm$ 6
8/11	9.4	5.8 $\pm$ 5.3	0.0 $\pm$ 5.3	$-0 \pm$ 6
7/11	-6.2	5.0 $\pm$ 5.3	0.0 $\pm$ 5.3	0 $\pm$ 6
6/11	-17.1	3.1 $\pm$ 5.3	0.0 $\pm$ 5.3	0 $\pm$ 6
5/11	-2.2	0.0 $\pm$ 5.4	0.0 $\pm$ 5.4	1 $\pm$ 6
4/11	-31.1	$-2.2 \pm$ 5.3	0.0 $\pm$ 5.4	1 $\pm$ 6
3/11	-24.5	$-4.2 \pm$ 5.2	0.0 $\pm$ 5.3	1 $\pm$ 6
2/11	-46.2	$-3.3 \pm$ 5.1	0.0 $\pm$ 5.1	0 $\pm$ 6
1/11	-49.7	0.0 $\pm$ 5.0	0.0 $\pm$ 5.0	0 $\pm$ 5

Table 9: In-Phase measurements at 1 kHz (Elevenths)
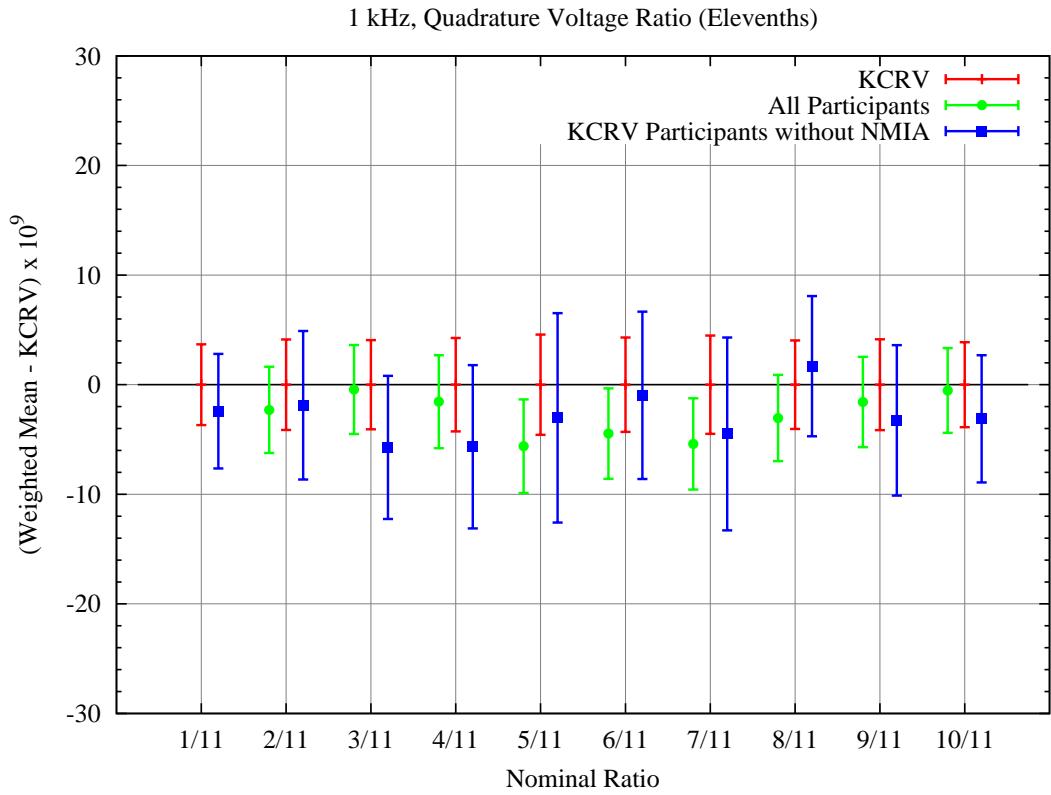
Figure 8: Elevenths - quadrature measurements at 1 kHz

| Ratio | KCRV | Result - KCRV | | |
		All Participants	KCRV	KCRV without NMIA
10/11	−123.5	−0.5 ± 3.9	0.0 ± 3.9	−3 ± 6
9/11	−176.9	−1.6 ± 4.1	0.0 ± 4.1	−3 ± 7
8/11	−200.9	−3.0 ± 3.9	0.0 ± 4.0	2 ± 6
7/11	−186.6	−5.4 ± 4.2	0.0 ± 4.5	−4 ± 9
6/11	−156.5	−4.5 ± 4.1	0.0 ± 4.3	−1 ± 8
5/11	−124.9	−5.6 ± 4.3	0.0 ± 4.6	−3 ± 10
4/11	−46.8	−1.5 ± 4.2	0.0 ± 4.3	−6 ± 7
3/11	−1.6	−0.4 ± 4.1	0.0 ± 4.1	−6 ± 7
2/11	48.9	−2.3 ± 3.9	0.0 ± 4.1	−2 ± 7
1/11	59.6	52.5 ± 3.7	0.0 ± 3.7	−2 ± 5

Table 10: Quadrature measurements at 1 kHz (Elevenths)
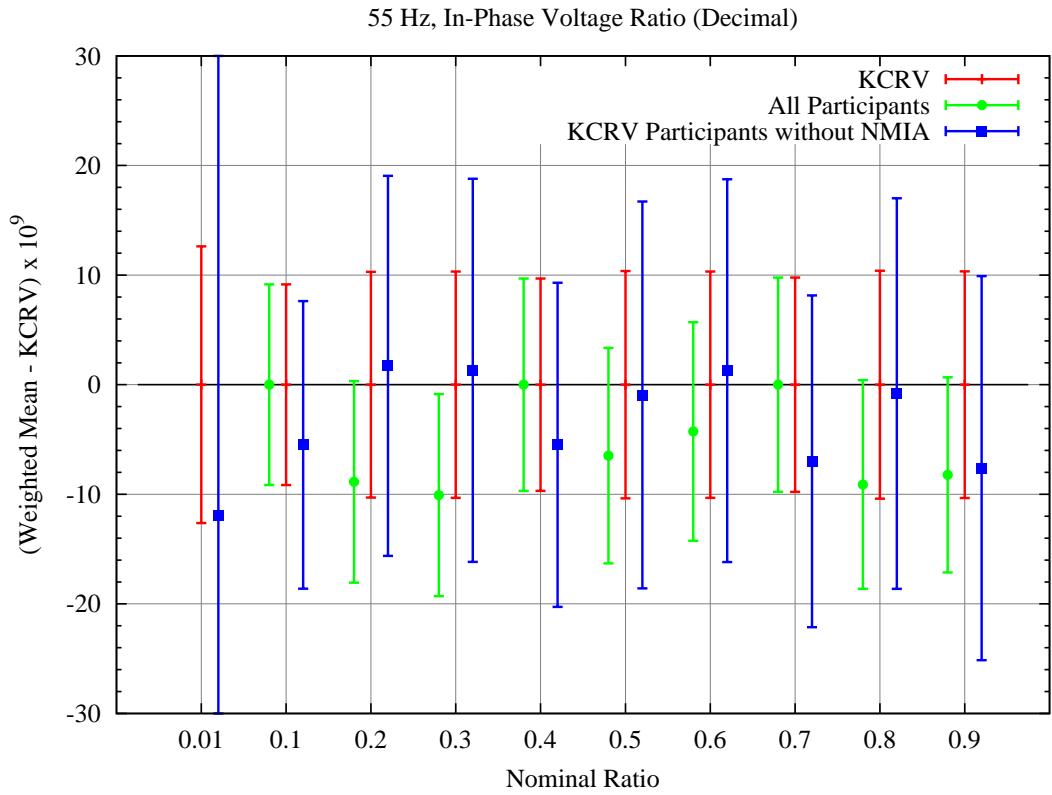
Figure 9: Decimal ratios - in-phase measurements at 55 Hz

		Result - KCRV		
Ratio	KCRV	All Participants	KCRV	KCRV without NMIA
0.9	-45.1	-8.2 ± 8.9	0.0 ± 10.3	-8 ± 18
0.8	-96.4	-9.1 ± 9.5	0.0 ± 10.4	-1 ± 18
0.7	-99.0	0.0 ± 9.8	0.0 ± 9.8	-7 ± 15
0.6	-121.3	-4.3 ± 10.0	0.0 ± 10.3	1 ± 17
0.5	-108.5	-6.5 ± 9.8	0.0 ± 10.4	-1 ± 18
0.4	-155.1	0.0 ± 9.7	0.0 ± 9.7	-5 ± 15
0.3	-164.3	-10.1 ± 9.2	0.0 ± 10.3	1 ± 17
0.2	-147.1	-8.9 ± 9.2	0.0 ± 10.3	2 ± 17
0.1	-131.2	0.0 ± 9.2	0.0 ± 9.2	-5 ± 13
0.01	-3814.6	63.1 ± 10.5	0.0 ± 12.6	-12 ± 59

Table 11: In-Phase measurements at 55 Hz (Decimal)
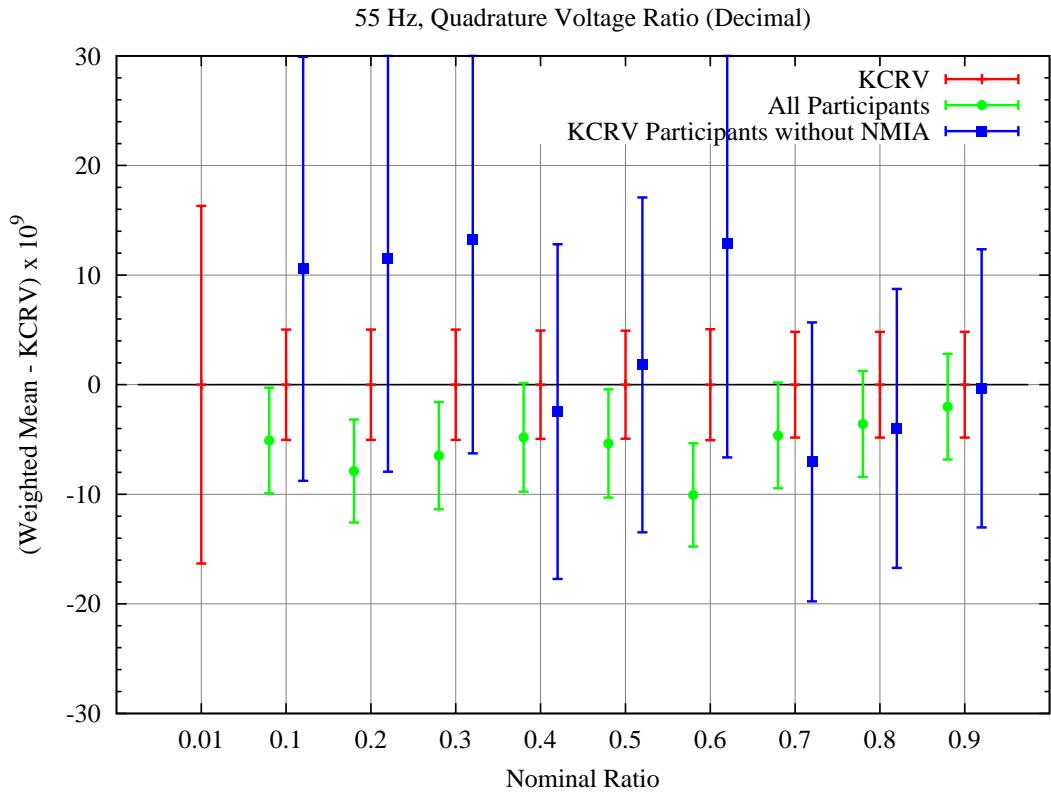
Figure 10: Decimal ratios - quadrature measurements at 55 Hz

		Result - KCRV		
Ratio	KCRV	All Participants	KCRV	KCRV without NMIA
0.9	120.9	$-2.0 \quad \pm \quad 4.8$	$0.0 \quad \pm \quad 4.8$	-0 ± 13
0.8	214.3	$-3.6 \quad \pm \quad 4.8$	$0.0 \quad \pm \quad 4.8$	-4 ± 13
0.7	212.8	$-4.6 \quad \pm \quad 4.8$	$0.0 \quad \pm \quad 4.8$	-7 ± 13
0.6	235.9	$-10.1 \quad \pm \quad 4.7$	$0.0 \quad \pm \quad 5.1$	13 ± 19
0.5	200.2	$-5.4 \quad \pm \quad 4.9$	$0.0 \quad \pm \quad 4.9$	2 ± 15
0.4	165.7	$-4.8 \quad \pm \quad 4.9$	$0.0 \quad \pm \quad 4.9$	-2 ± 15
0.3	176.9	$-6.5 \quad \pm \quad 4.9$	$0.0 \quad \pm \quad 5.0$	13 ± 19
0.2	153.8	$-7.9 \quad \pm \quad 4.7$	$0.0 \quad \pm \quad 5.0$	11 ± 19
0.1	128.8	$-5.1 \quad \pm \quad 4.8$	$0.0 \quad \pm \quad 5.0$	11 ± 19
0.01	3848.8	$-912.5 \quad \pm \quad 12.8$	$0.0 \quad \pm \quad 16.3$	-57 ± 113

Table 12: Quadrature measurements at 55 Hz (Decimal)

55 Hz, In-Phase Voltage Ratio (Elevenths)
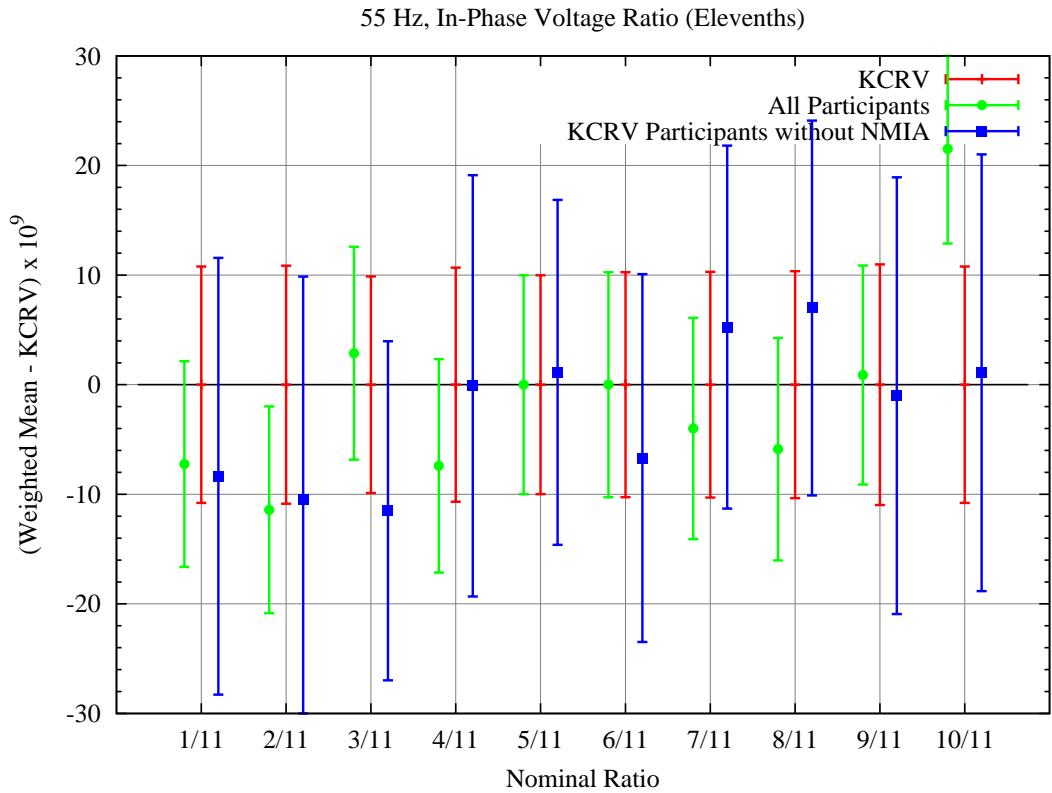
Figure 11: Elevenths - in-phase measurements at 55 Hz

| Ratio | KCRV | Result - KCRV | | |
		All Participants	KCRV	KCRV without NMIA
10/11	129.4	21.5 $\pm$ 8.6	0.0 $\pm$ 10.8	1 $\pm$ 20
9/11	18.4	0.9 $\pm$ 10.0	0.0 $\pm$ 11.0	$-1 \pm$ 20
8/11	-9.2	-5.9 $\pm$ 10.1	0.0 $\pm$ 10.4	7 $\pm$ 17
7/11	-96.1	-4.0 $\pm$ 10.1	0.0 $\pm$ 10.3	5 $\pm$ 17
6/11	-150.5	0.0 $\pm$ 10.3	0.0 $\pm$ 10.3	$-7 \pm$ 17
5/11	-122.8	0.0 $\pm$ 10.0	0.0 $\pm$ 10.0	1 $\pm$ 16
4/11	-258.7	-7.4 $\pm$ 9.7	0.0 $\pm$ 10.7	$-0 \pm$ 19
3/11	-253.7	2.9 $\pm$ 9.7	0.0 $\pm$ 9.9	$-12 \pm$ 15
2/11	-299.0	-11.4 $\pm$ 9.4	0.0 $\pm$ 10.9	$-10 \pm$ 20
1/11	-259.4	-7.2 $\pm$ 9.4	0.0 $\pm$ 10.8	$-8 \pm$ 20

Table 13: In-Phase measurements at 55 Hz (Elevenths)
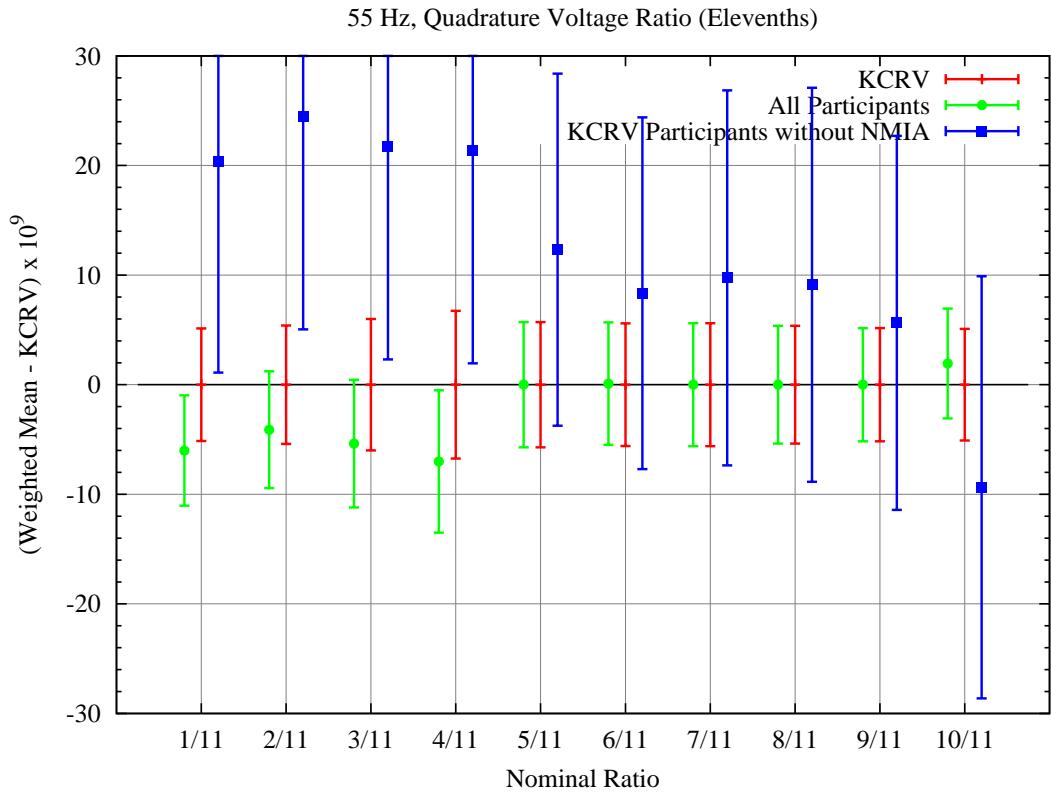
Figure 12: Elevenths - quadrature measurements at 55 Hz

| Ratio | KCRV | Result - KCRV | | |
		All Participants	KCRV	KCRV without NMIA
10/11	−145.7	1.9 ± 5.0	0.0 ± 5.1	−9 ± 19
9/11	−30.4	0.0 ± 5.2	0.0 ± 5.2	6 ± 17
8/11	−5.1	0.0 ± 5.4	0.0 ± 5.4	9 ± 18
7/11	96.2	0.0 ± 5.6	0.0 ± 5.6	10 ± 17
6/11	158.2	0.1 ± 5.6	0.0 ± 5.6	8 ± 16
5/11	150.8	0.0 ± 5.7	0.0 ± 5.7	12 ± 16
4/11	327.9	−7.0 ± 6.5	0.0 ± 6.7	21 ± 19
3/11	322.3	−5.4 ± 5.8	0.0 ± 6.0	22 ± 19
2/11	380.1	−4.1 ± 5.3	0.0 ± 5.4	24 ± 19
1/11	323.6	−6.0 ± 5.0	0.0 ± 5.1	20 ± 19

Table 14: Quadrature measurements at 55 Hz (Elevenths)

Results

3 Results

The Key Comparison Reference Values (KCRVs) for the comparison are tabulated below. The following pages contain tables and graphs for each KCRV. The tables show the degree of equivalence for each laboratory and the degree of equivalence between laboratories. The graphs show the degree of equivalence for each laboratory. All uncertainties are given as expanded uncertainties ($k = 2$).

Nominal Ratio	Frequency	In-Phase x 10^9		Quadrature x 10^9	
0.9	1 kHz	58.3	± 5.1	−71.6	± 3.9
0.8	1 kHz	71.5	± 5.3	−110.2	± 4.1
0.7	1 kHz	64.0	± 5.8	−137.0	± 4.5
0.6	1 kHz	39.0	± 5.7	−132.5	± 4.4
0.5	1 kHz	9.8	± 5.4	−130.3	± 4.5
0.4	1 kHz	−22.9	± 5.4	−97.0	± 4.4
0.3	1 kHz	−38.6	± 5.1	−51.0	± 4.3
0.2	1 kHz	−45.9	± 5.1	−15.4	± 4.1
0.1	1 kHz	−43.6	± 4.8	8.9	± 3.5
0.01	1 kHz	−1160.5	± 8.4	422.5	± 5.0
10/11	1 kHz	53.2	± 5.1	−123.5	± 3.9
9/11	1 kHz	21.8	± 5.2	−176.9	± 4.1
8/11	1 kHz	9.4	± 5.3	−200.9	± 4.0
7/11	1 kHz	−6.2	± 5.3	−186.6	± 4.5
6/11	1 kHz	−17.1	± 5.3	−156.5	± 4.3
5/11	1 kHz	−2.2	± 5.4	−124.9	± 4.6
4/11	1 kHz	−31.1	± 5.4	−46.8	± 4.3
3/11	1 kHz	−24.5	± 5.3	−1.6	± 4.1
2/11	1 kHz	−46.2	± 5.1	48.9	± 4.1
1/11	1 kHz	−49.7	± 5.0	59.6	± 3.7
0.9	55 Hz	−45.1	±10.3	120.9	± 4.8
0.8	55 Hz	−96.4	±10.4	214.3	± 4.8
0.7	55 Hz	−99.0	± 9.8	212.8	± 4.8
0.6	55 Hz	−121.3	±10.3	235.9	± 5.1
0.5	55 Hz	−108.5	±10.4	200.2	± 4.9
0.4	55 Hz	−155.1	± 9.7	165.7	± 4.9
0.3	55 Hz	−164.3	±10.3	176.9	± 5.0
0.2	55 Hz	−147.1	±10.3	153.8	± 5.0
0.1	55 Hz	−131.2	± 9.2	128.8	± 5.0
0.01	55 Hz	−3814.6	±12.6	3848.8	± 16.3
10/11	55 Hz	129.4	±10.8	−145.7	± 5.1
9/11	55 Hz	18.4	±11.0	−30.4	± 5.2
8/11	55 Hz	−9.2	±10.4	−5.1	± 5.4
7/11	55 Hz	−96.1	±10.3	96.2	± 5.6
6/11	55 Hz	−150.5	±10.3	158.2	± 5.6
5/11	55 Hz	−122.8	±10.0	150.8	± 5.7
4/11	55 Hz	−258.7	±10.7	327.9	± 6.7
3/11	55 Hz	−253.7	± 9.9	322.3	± 6.0
2/11	55 Hz	−299.0	±10.9	380.1	± 5.4
1/11	55 Hz	−259.4	±10.8	323.6	± 5.1

Table 15: Key Comparison Reference Values

Table 16: Degree of equivalence to the KCRV for the Nominal Ratio 0.9 at 1 kHz, In-Phase Voltage Ratio (nV/V)

NMIJ	CEM	NMIA	IEN	KRISS	LCIE	METAS	NIM
21 ± 14	−13 ± 51	−0.3 ±11.7	6 ± 16	10 ± 20	88 ± 29	2 ± 28	−3 ± 12

NIST	NPL	NPLI	NRC	PTB	SP	UME	VNIIM	VSL
10 ± 44	1 ± 27	−12 ± 13	−9 ± 31	−7 ± 23	−4 ± 49	−13 ± 50	3 ± 21	−12 ± 21

Table 17: Laboratory - Laboratory degree of equivalence for the Nominal Ratio 0.9 at 1 kHz, In-Phase Voltage Ratio (nV/V)

	NMIJ	CEM	NMIA	IEN	KRISS	LCIE	METAS	NIM
NMIJ		34 ± 54	21 ± 20	15 ± 23	11 ± 25	−67 ± 33	19 ± 32	24 ± 20
CEM	−34 ± 54		−13 ± 53	−19 ± 54	−23 ± 56	−101 ± 59	−15 ± 59	−10 ± 53
NMIA	−21 ± 20	13 ± 53		−6 ± 21	−10 ± 24	−88 ± 32	−2 ± 31	3 ± 19
IEN	−15 ± 23	19 ± 54	6 ± 21		−4 ± 27	−82 ± 34	4 ± 33	9 ± 22
KRISS	−11 ± 25	23 ± 56	10 ± 24	4 ± 27		−78 ± 35	8 ± 35	13 ± 24
LCIE	67 ± 33	101 ± 59	88 ± 32	82 ± 34	78 ± 35		86 ± 41	91 ± 32
METAS	−19 ± 32	15 ± 59	2 ± 31	−4 ± 33	−8 ± 35	−86 ± 41		5 ± 32
NIM	−24 ± 20	10 ± 53	−3 ± 19	−9 ± 22	−13 ± 24	−91 ± 32	−5 ± 32	
NIST	−11 ± 46	23 ± 68	10 ± 46	4 ± 47	0 ± 48	−78 ± 53	8 ± 52	13 ± 46
NPL	−20 ± 32	14 ± 59	1 ± 31	−5 ± 33	−9 ± 35	−87 ± 40	−1 ± 40	4 ± 31
NPLI	−33 ± 20	1 ± 53	−12 ± 19	−18 ± 22	−22 ± 25	−100 ± 32	−14 ± 32	−9 ± 19
NRC	−30 ± 35	4 ± 60	−9 ± 34	−15 ± 36	−19 ± 37	−97 ± 43	−11 ± 42	−6 ± 34
PTB	−28 ± 28	6 ± 57	−7 ± 27	−13 ± 29	−17 ± 31	−95 ± 37	−9 ± 37	−4 ± 27
SP	−25 ± 52	9 ± 72	−4 ± 51	−10 ± 53	−14 ± 54	−92 ± 58	−6 ± 57	−1 ± 51
UME	−34 ± 52	0 ± 72	−13 ± 52	−19 ± 53	−23 ± 54	−101 ± 58	−15 ± 58	−10 ± 52
VNIIM	−18 ± 27	16 ± 56	3 ± 26	−3 ± 28	−7 ± 30	−85 ± 36	1 ± 36	6 ± 26
VSL	−33 ± 26	1 ± 56	−12 ± 25	−18 ± 27	−22 ± 30	−100 ± 36	−14 ± 36	−9 ± 25

	NIST	NPL	NPLI	NRC	PTB	SP	UME	VNIIM	VSL
NMIJ	11 ± 46	20 ± 32	33 ± 20	30 ± 35	28 ± 28	25 ± 52	34 ± 52	18 ± 27	33 ± 26
CEM	−23 ± 68	−14 ± 59	−1 ± 53	−4 ± 60	−6 ± 57	−9 ± 72	0 ± 72	−16 ± 56	−1 ± 56
NMIA	−10 ± 46	−1 ± 31	12 ± 19	9 ± 34	7 ± 27	4 ± 51	13 ± 52	−3 ± 26	12 ± 25
IEN	−4 ± 47	5 ± 33	18 ± 22	15 ± 36	13 ± 29	10 ± 53	19 ± 53	3 ± 28	18 ± 27
KRISS	0 ± 48	9 ± 35	22 ± 25	19 ± 37	17 ± 31	14 ± 54	23 ± 54	7 ± 30	22 ± 30
LCIE	78 ± 53	87 ± 40	100 ± 32	97 ± 43	95 ± 37	92 ± 58	101 ± 58	85 ± 36	100 ± 36
METAS	−8 ± 52	1 ± 40	14 ± 32	11 ± 42	9 ± 37	6 ± 57	15 ± 58	−1 ± 36	14 ± 36
NIM	−13 ± 46	−4 ± 31	9 ± 19	6 ± 34	4 ± 27	1 ± 51	10 ± 52	−6 ± 26	9 ± 25
NIST		9 ± 52	22 ± 46	19 ± 54	17 ± 50	14 ± 66	23 ± 67	7 ± 49	22 ± 49
NPL	−9 ± 52		13 ± 31	10 ± 42	8 ± 37	5 ± 57	14 ± 57	−2 ± 35	13 ± 35
NPLI	−22 ± 46	−13 ± 31		−3 ± 34	−5 ± 27	−8 ± 52	1 ± 52	−15 ± 26	0 ± 25
NRC	−19 ± 54	−10 ± 42	3 ± 34		−2 ± 39	−5 ± 59	4 ± 59	−12 ± 38	3 ± 38
PTB	−17 ± 50	−8 ± 37	5 ± 27	2 ± 39		−3 ± 55	6 ± 55	−10 ± 32	5 ± 32
SP	−14 ± 66	−5 ± 57	8 ± 52	5 ± 59	3 ± 55		9 ± 70	−7 ± 54	8 ± 54
UME	−23 ± 67	−14 ± 57	−1 ± 52	−4 ± 59	−6 ± 55	−9 ± 70		−16 ± 55	−1 ± 54
VNIIM	−7 ± 49	2 ± 35	15 ± 26	12 ± 38	10 ± 32	7 ± 54	16 ± 55		15 ± 31
VSL	−22 ± 49	−13 ± 35	0 ± 25	−3 ± 38	−5 ± 32	−8 ± 54	1 ± 54	−15 ± 31	

Nominal Ratio: 0.9 at 1 kHz, In-Phase Voltage Ratio (KCRV $\pm$ 2σ) is (58.3 $\pm$ 5.1) x 10^{-9} of input
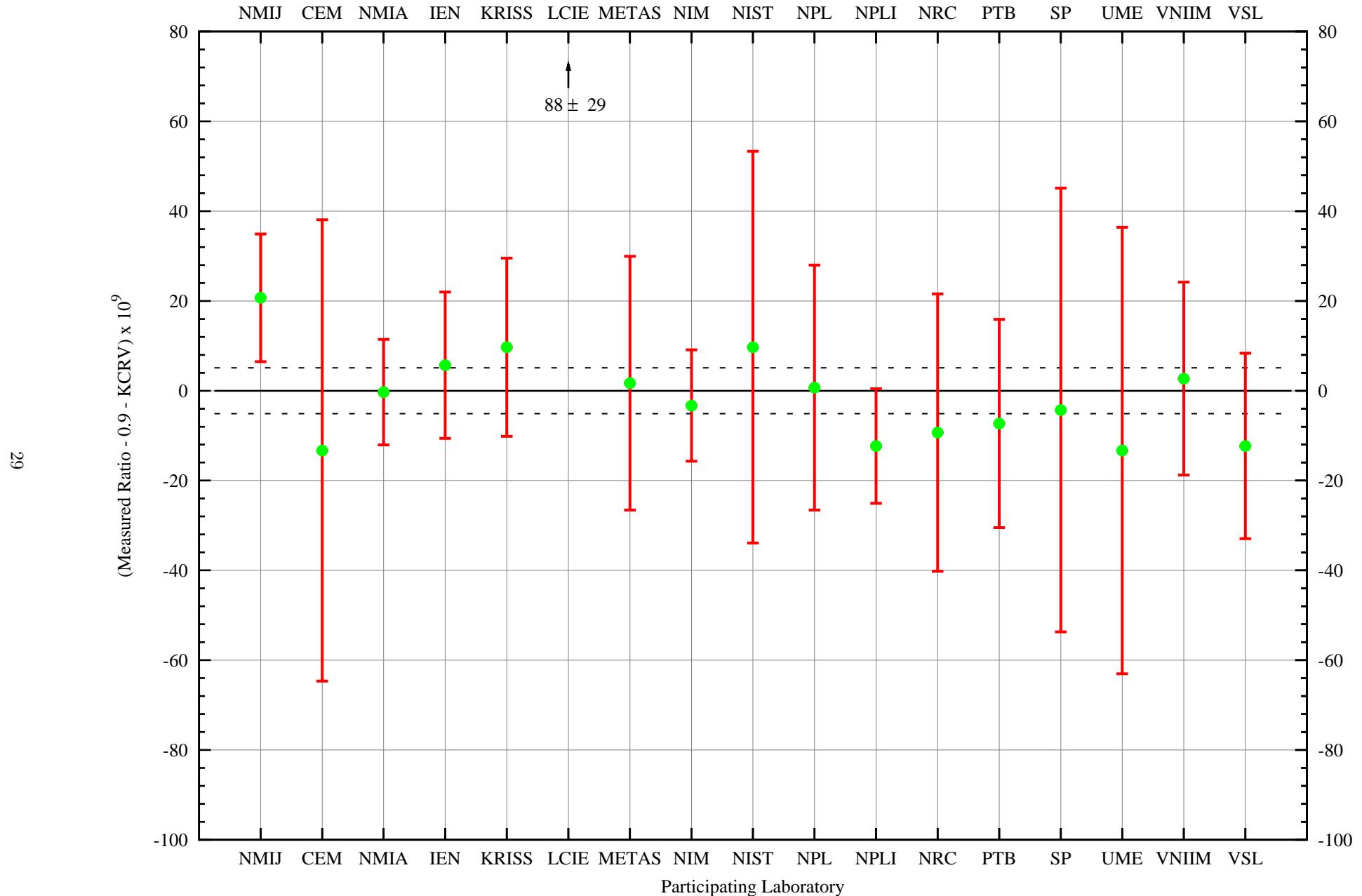
Table 18: Degree of equivalence to the KCRV for the Nominal Ratio 0.9 at 1 kHz, Quadrature Voltage Ratio (nV/V)

NMIJ	CEM	NMIA	IEN	KRISS	LCIE	METAS	NIM
−3 ± 31	4 ± 48	2.6 ± 3.5	7 ± 10	−1 ± 24	−8316 ± 26	4 ± 68	−6 ± 9

NIST	NPL	NPLI	NRC	PTB	SP	UME	VNIIM	VSL
3 ± 100	−12 ± 25	−3098 ± 300	−23 ± 29	−11 ± 20	5 ± 71	−14 ± 59	6 ± 28	−128 ± 110

Table 19: Laboratory - Laboratory degree of equivalence for the Nominal Ratio 0.9 at 1 kHz, Quadrature Voltage Ratio (nV/V)

	NMIJ	CEM	NMIA	IEN	KRISS	LCIE	METAS	NIM
NMIJ		−7 ± 57	−6 ± 32	−10 ± 33	−2 ± 40	8313 ± 41	−7 ± 75	3 ± 33
CEM	7 ± 57		1 ± 48	−3 ± 49	5 ± 54	8320 ± 55	0 ± 83	10 ± 49
NMIA	6 ± 32	−1 ± 48		−4 ± 12	4 ± 25	8319 ± 27	−1 ± 68	9 ± 11
IEN	10 ± 33	3 ± 49	4 ± 12		8 ± 27	8323 ± 29	3 ± 69	13 ± 14
KRISS	2 ± 40	−5 ± 54	−4 ± 25	−8 ± 27		8315 ± 36	−5 ± 72	5 ± 26
LCIE	−8313 ± 41	−8320 ± 55	−8319 ± 27	−8323 ± 29	−8315 ± 36		−8320 ± 73	−8310 ± 28
METAS	7 ± 75	0 ± 83	1 ± 68	−3 ± 69	5 ± 72	8320 ± 73		10 ± 68
NIM	−3 ± 33	−10 ± 49	−9 ± 11	−13 ± 14	−5 ± 26	8310 ± 28	−10 ± 68	
NIST	6 ± 105	−1 ± 111	0 ± 100	−4 ± 101	4 ± 103	8319 ± 104	−1 ± 121	9 ± 101
NPL	−8 ± 40	−15 ± 54	−14 ± 26	−18 ± 27	−10 ± 35	8305 ± 37	−15 ± 72	−5 ± 27
NPLI	−3095 ± 302	−3102 ± 304	−3101 ± 300	−3105 ± 300	−3097 ± 301	5218 ± 301	−3102 ± 308	−3092 ± 300
NRC	−20 ± 43	−27 ± 56	−26 ± 30	−30 ± 31	−22 ± 38	8293 ± 39	−27 ± 74	−17 ± 31
PTB	−8 ± 38	−15 ± 52	−14 ± 21	−18 ± 23	−10 ± 32	8305 ± 34	−15 ± 71	−5 ± 23
SP	8 ± 78	1 ± 86	2 ± 71	−2 ± 72	6 ± 75	8321 ± 76	1 ± 98	11 ± 72
UME	−11 ± 67	−18 ± 76	−17 ± 60	−21 ± 61	−13 ± 64	8302 ± 65	−18 ± 90	−8 ± 60
VNIIM	9 ± 42	2 ± 56	3 ± 29	−1 ± 30	7 ± 38	8322 ± 39	2 ± 74	12 ± 30
VSL	−125 ± 115	−132 ± 120	−131 ± 110	−135 ± 111	−127 ± 113	8188 ± 113	−132 ± 129	−122 ± 111

	NIST	NPL	NPLI	NRC	PTB	SP	UME	VNIIM	VSL
NMIJ	−6 ± 105	8 ± 40	3095 ± 302	20 ± 43	8 ± 38	−8 ± 78	11 ± 67	−9 ± 42	125 ± 115
CEM	1 ± 111	15 ± 54	3102 ± 304	27 ± 56	15 ± 52	−1 ± 86	18 ± 76	−2 ± 56	132 ± 120
NMIA	0 ± 100	14 ± 26	3101 ± 300	26 ± 30	14 ± 21	−2 ± 71	17 ± 60	−3 ± 29	131 ± 110
IEN	4 ± 101	18 ± 27	3105 ± 300	30 ± 31	18 ± 23	2 ± 72	21 ± 61	1 ± 30	135 ± 111
KRISS	−4 ± 103	10 ± 35	3097 ± 301	22 ± 38	10 ± 32	−6 ± 75	13 ± 64	−7 ± 38	127 ± 113
LCIE	−8319 ± 104	−8305 ± 37	−5218 ± 301	−8293 ± 39	−8305 ± 34	−8321 ± 76	−8302 ± 65	−8322 ± 39	−8188 ± 113
METAS	1 ± 121	15 ± 72	3102 ± 308	27 ± 74	15 ± 71	−1 ± 98	18 ± 90	−2 ± 74	132 ± 129
NIM	−9 ± 101	5 ± 27	3092 ± 300	17 ± 31	5 ± 23	−11 ± 72	8 ± 60	−12 ± 30	122 ± 111
NIST		14 ± 103	3101 ± 316	26 ± 104	14 ± 102	−2 ± 123	17 ± 117	−3 ± 104	131 ± 149
NPL	−14 ± 103		3087 ± 301	12 ± 38	−0 ± 33	−16 ± 76	3 ± 65	−17 ± 38	117 ± 113
NPLI	−3101 ± 316	−3087 ± 301		−3075 ± 301	−3087 ± 301	−3103 ± 308	−3084 ± 306	−3104 ± 301	−2970 ± 320
NRC	−26 ± 104	−12 ± 38	3075 ± 301		−12 ± 36	−28 ± 77	−9 ± 66	−29 ± 41	105 ± 114
PTB	−14 ± 102	0 ± 33	3087 ± 301	12 ± 36		−16 ± 74	3 ± 63	−17 ± 35	117 ± 112
SP	2 ± 123	16 ± 76	3103 ± 308	28 ± 77	16 ± 74		19 ± 93	−1 ± 77	133 ± 131
UME	−17 ± 117	−3 ± 65	3084 ± 306	9 ± 66	−3 ± 63	−19 ± 93		−20 ± 66	114 ± 125
VNIIM	3 ± 104	17 ± 38	3104 ± 301	29 ± 41	17 ± 35	1 ± 77	20 ± 66		134 ± 114
VSL	−131 ± 149	−117 ± 113	2970 ± 320	−105 ± 114	−117 ± 112	−133 ± 131	−114 ± 125	−134 ± 114	

Nominal Ratio: 0.9 at 1 kHz, Quadrature Voltage Ratio (KCRV $\pm$ 2σ) is (-71.6 $\pm$ 3.9) x 10^{-9} of input
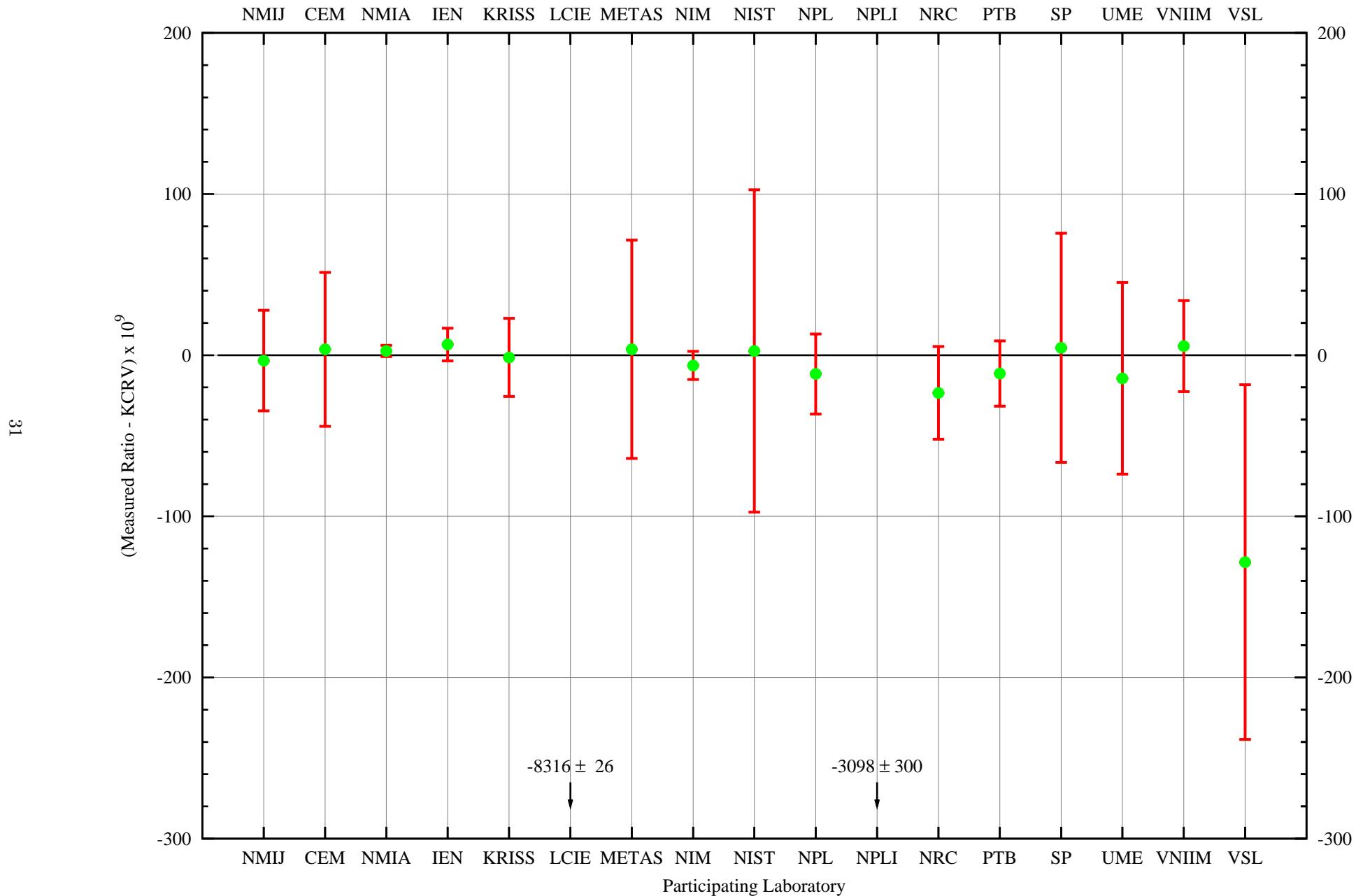
Table 20: Degree of equivalence to the KCRV for the Nominal Ratio 0.8 at 1 kHz, In-Phase Voltage Ratio (nV/V)

NMIJ	CEM	NMIA	IEN	KRISS	LCIE	METAS	NIM
21 ± 14	−27 ± 51	−4.5 ±11.7	4 ± 18	8 ± 20	136 ± 31	−4 ± 35	−9 ± 14

NIST	NPL	NPLI	NRC	PTB	SP	UME	VNIIM	VSL
11 ± 43	−4 ± 27	6 ± 13	−21 ± 31	−17 ± 23	−7 ± 49	−22 ± 50	−1 ± 21	−17 ± 27

Table 21: Laboratory - Laboratory degree of equivalence for the Nominal Ratio 0.8 at 1 kHz, In-Phase Voltage Ratio (nV/V)

	NMIJ	CEM	NMIA	IEN	KRISS	LCIE	METAS	NIM
NMIJ		48 ± 54	26 ± 20	17 ± 24	13 ± 25	−115 ± 35	25 ± 39	30 ± 21
CEM	−48 ± 54		−22 ± 53	−31 ± 55	−35 ± 56	−163 ± 61	−23 ± 63	−18 ± 54
NMIA	−26 ± 20	22 ± 53		−9 ± 22	−13 ± 24	−141 ± 34	−1 ± 38	4 ± 20
IEN	−17 ± 24	31 ± 55	9 ± 22		−4 ± 28	−132 ± 37	8 ± 40	13 ± 24
KRISS	−13 ± 25	35 ± 56	13 ± 24	4 ± 28		−128 ± 38	12 ± 41	17 ± 25
LCIE	115 ± 35	163 ± 61	141 ± 34	132 ± 37	128 ± 38		140 ± 48	145 ± 35
METAS	−25 ± 39	23 ± 63	1 ± 38	−8 ± 40	−12 ± 41	−140 ± 48		5 ± 39
NIM	−30 ± 21	18 ± 54	−4 ± 20	−13 ± 24	−17 ± 25	−145 ± 35	−5 ± 39	
NIST	−10 ± 46	38 ± 67	16 ± 45	7 ± 47	3 ± 48	−125 ± 53	15 ± 56	20 ± 46
NPL	−25 ± 32	23 ± 59	1 ± 31	−8 ± 33	−12 ± 35	−140 ± 42	−0 ± 45	5 ± 32
NPLI	−15 ± 20	33 ± 53	11 ± 19	2 ± 23	−2 ± 25	−130 ± 35	10 ± 38	15 ± 20
NRC	−42 ± 35	6 ± 60	−16 ± 34	−25 ± 36	−29 ± 37	−157 ± 45	−17 ± 47	−12 ± 35
PTB	−38 ± 28	10 ± 57	−12 ± 27	−21 ± 30	−25 ± 31	−153 ± 40	−13 ± 43	−8 ± 28
SP	−28 ± 52	20 ± 72	−2 ± 51	−11 ± 53	−15 ± 54	−143 ± 59	−3 ± 61	2 ± 52
UME	−43 ± 52	5 ± 72	−17 ± 52	−26 ± 53	−30 ± 54	−158 ± 59	−18 ± 61	−13 ± 52
VNIIM	−22 ± 27	26 ± 56	4 ± 26	−5 ± 29	−9 ± 30	−137 ± 39	3 ± 42	8 ± 27
VSL	−38 ± 31	10 ± 58	−12 ± 30	−21 ± 33	−25 ± 34	−153 ± 42	−13 ± 45	−8 ± 31

	NIST	NPL	NPLI	NRC	PTB	SP	UME	VNIIM	VSL
NMIJ	10 ± 46	25 ± 32	15 ± 20	42 ± 35	38 ± 28	28 ± 52	43 ± 52	22 ± 27	38 ± 31
CEM	−38 ± 67	−23 ± 59	−33 ± 53	−6 ± 60	−10 ± 57	−20 ± 72	−5 ± 72	−26 ± 56	−10 ± 58
NMIA	−16 ± 45	−1 ± 31	−11 ± 19	16 ± 34	12 ± 27	2 ± 51	17 ± 52	−4 ± 26	12 ± 30
IEN	−7 ± 47	8 ± 33	−2 ± 23	25 ± 36	21 ± 30	11 ± 53	26 ± 53	5 ± 29	21 ± 33
KRISS	−3 ± 48	12 ± 35	2 ± 25	29 ± 37	25 ± 31	15 ± 54	30 ± 54	9 ± 30	25 ± 34
LCIE	125 ± 53	140 ± 42	130 ± 35	157 ± 45	153 ± 40	143 ± 59	158 ± 59	137 ± 39	153 ± 42
METAS	−15 ± 56	0 ± 45	−10 ± 38	17 ± 47	13 ± 43	3 ± 61	18 ± 61	−3 ± 42	13 ± 45
NIM	−20 ± 46	−5 ± 32	−15 ± 20	12 ± 35	8 ± 28	−2 ± 52	13 ± 52	−8 ± 27	8 ± 31
NIST		15 ± 51	5 ± 45	32 ± 53	28 ± 49	18 ± 66	33 ± 66	12 ± 48	28 ± 51
NPL	−15 ± 51		−10 ± 31	17 ± 42	13 ± 37	3 ± 57	18 ± 57	−3 ± 35	13 ± 39
NPLI	−5 ± 45	10 ± 31		27 ± 34	23 ± 27	13 ± 52	28 ± 52	7 ± 26	23 ± 30
NRC	−32 ± 53	−17 ± 42	−27 ± 34		−4 ± 39	−14 ± 59	1 ± 59	−20 ± 38	−4 ± 41
PTB	−28 ± 49	−13 ± 37	−23 ± 27	4 ± 39		−10 ± 55	5 ± 55	−16 ± 32	0 ± 36
SP	−18 ± 66	−3 ± 57	−13 ± 52	14 ± 59	10 ± 55		15 ± 70	−6 ± 54	10 ± 57
UME	−33 ± 66	−18 ± 57	−28 ± 52	−1 ± 59	−5 ± 55	−15 ± 70		−21 ± 55	−5 ± 57
VNIIM	−12 ± 48	3 ± 35	−7 ± 26	20 ± 38	16 ± 32	6 ± 54	21 ± 55		16 ± 35
VSL	−28 ± 51	−13 ± 39	−23 ± 30	4 ± 41	0 ± 36	−10 ± 57	5 ± 57	−16 ± 35	

Nominal Ratio: 0.8 at 1 kHz, In-Phase Voltage Ratio (KCRV $\pm$ 2σ) is (71.5 $\pm$ 5.3) x 10^{-9} of input

136 $\pm$ 31

(Measured Ratio - 0.8 - KCRV) x 10^9

Participating Laboratory

NMIJ CEM NMIA IEN KRISS LCIE METAS NIM NIST NPL NPLI NRC PTB SP UME VNIIM VSL
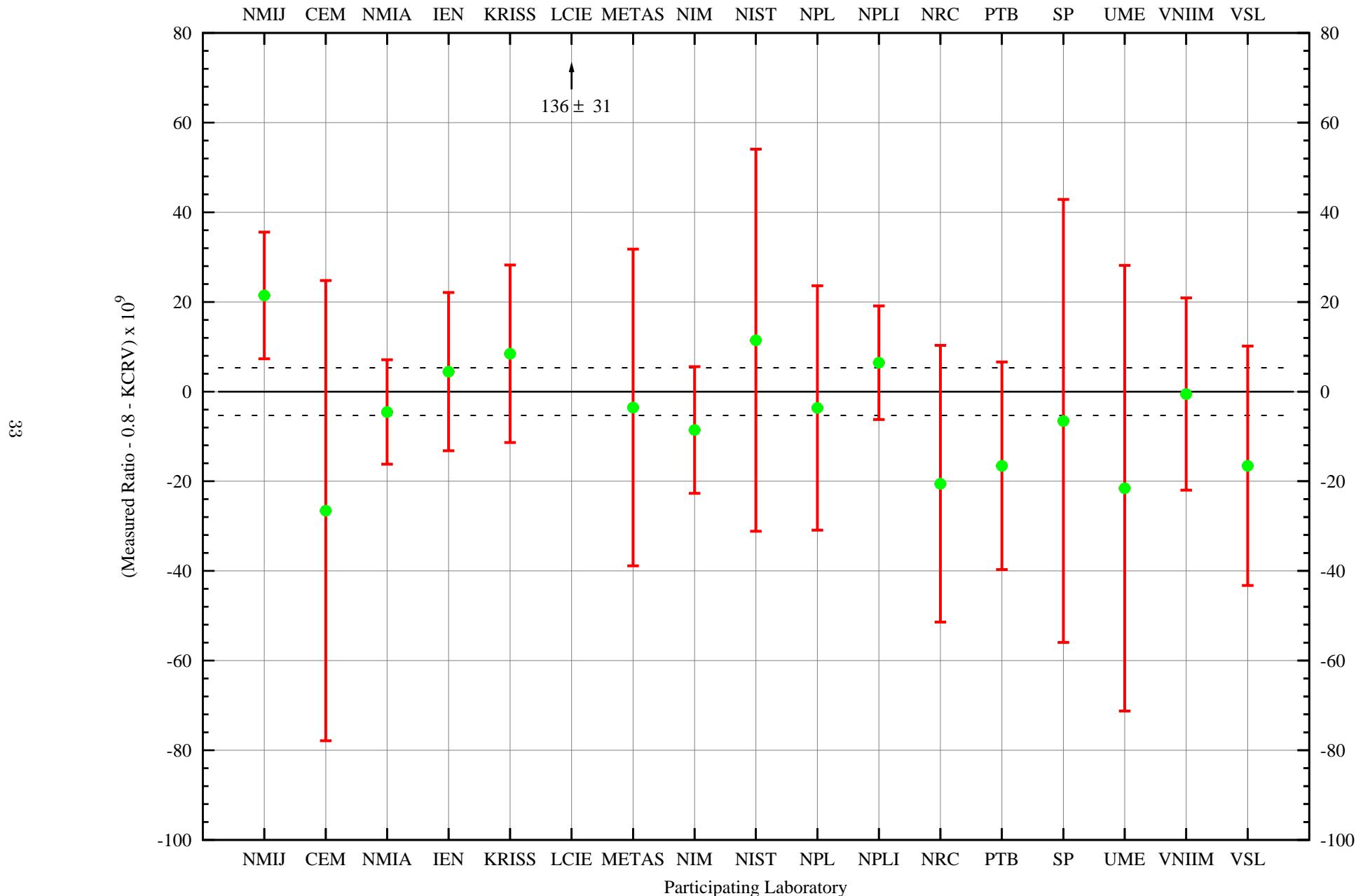
Table 22: Degree of equivalence to the KCRV for the Nominal Ratio 0.8 at 1 kHz, Quadrature Voltage Ratio (nV/V)

NMIJ	CEM	NMIA	IEN	KRISS	LCIE	METAS	NIM
−8 ± 29	6 ± 48	3.2 ± 3.2	6 ± 10	−3 ± 24	−12067 ± 29	7 ± 108	−12 ± 16

NIST	NPL	NPLI	NRC	PTB	SP	UME	VNIIM	VSL
6 ± 100	−19 ± 25	−6210 ± 300	−41 ± 29	−19 ± 20	−5 ± 71	−20 ± 59	11 ± 28	−240 ± 150

Table 23: Laboratory - Laboratory degree of equivalence for the Nominal Ratio 0.8 at 1 kHz, Quadrature Voltage Ratio (nV/V)

	NMIJ	CEM	NMIA	IEN	KRISS	LCIE	METAS	NIM
NMIJ		−14 ± 56	−11 ± 30	−14 ± 32	−5 ± 38	12059 ± 42	−15 ± 112	4 ± 34
CEM	14 ± 56		3 ± 48	0 ± 49	9 ± 54	12073 ± 56	−1 ± 118	18 ± 51
NMIA	11 ± 30	−3 ± 48		−3 ± 12	6 ± 25	12070 ± 30	−4 ± 108	15 ± 18
IEN	14 ± 32	0 ± 49	3 ± 12		9 ± 27	12073 ± 32	−1 ± 108	18 ± 20
KRISS	5 ± 38	−9 ± 54	−6 ± 25	−9 ± 27		12064 ± 38	−10 ± 111	9 ± 30
LCIE	−12059 ± 42	−12073 ± 56	−12070 ± 30	−12073 ± 32	−12064 ± 38		−12074 ± 112	−12055 ± 34
METAS	15 ± 112	1 ± 118	4 ± 108	1 ± 108	10 ± 111	12074 ± 112		19 ± 109
NIM	−4 ± 34	−18 ± 51	−15 ± 18	−18 ± 20	−9 ± 30	12055 ± 34	−19 ± 109	
NIST	14 ± 104	0 ± 111	3 ± 100	0 ± 101	9 ± 103	12073 ± 104	−1 ± 147	18 ± 102
NPL	−11 ± 39	−25 ± 54	−22 ± 26	−25 ± 28	−16 ± 35	12048 ± 39	−26 ± 111	−7 ± 30
NPLI	−6202 ± 301	−6216 ± 304	−6213 ± 300	−6216 ± 300	−6207 ± 301	5857 ± 301	−6217 ± 319	−6198 ± 301
NRC	−33 ± 41	−47 ± 56	−44 ± 30	−47 ± 31	−38 ± 38	12026 ± 41	−48 ± 112	−29 ± 34
PTB	−11 ± 36	−25 ± 52	−22 ± 21	−25 ± 24	−16 ± 32	12048 ± 36	−26 ± 110	−7 ± 27
SP	3 ± 77	−11 ± 86	−8 ± 71	−11 ± 72	−2 ± 75	12062 ± 77	−12 ± 129	7 ± 73
UME	−12 ± 66	−26 ± 76	−23 ± 60	−26 ± 61	−17 ± 64	12047 ± 66	−27 ± 123	−8 ± 62
VNIIM	19 ± 41	5 ± 56	8 ± 29	5 ± 31	14 ± 38	12078 ± 41	4 ± 111	23 ± 33
VSL	−232 ± 153	−246 ± 158	−243 ± 150	−246 ± 151	−237 ± 152	11827 ± 153	−247 ± 185	−228 ± 151

	NIST	NPL	NPLI	NRC	PTB	SP	UME	VNIIM	VSL
NMIJ	−14 ± 104	11 ± 39	6202 ± 301	33 ± 41	11 ± 36	−3 ± 77	12 ± 66	−19 ± 41	232 ± 153
CEM	0 ± 111	25 ± 54	6216 ± 304	47 ± 56	25 ± 52	11 ± 86	26 ± 76	−5 ± 56	246 ± 158
NMIA	−3 ± 100	22 ± 26	6213 ± 300	44 ± 30	22 ± 21	8 ± 71	23 ± 60	−8 ± 29	243 ± 150
IEN	0 ± 101	25 ± 28	6216 ± 300	47 ± 31	25 ± 24	11 ± 72	26 ± 61	−5 ± 31	246 ± 151
KRISS	−9 ± 103	16 ± 35	6207 ± 301	38 ± 38	16 ± 32	2 ± 75	17 ± 64	−14 ± 38	237 ± 152
LCIE	−12073 ± 104	−12048 ± 39	−5857 ± 301	−12026 ± 41	−12048 ± 36	−12062 ± 77	−12047 ± 66	−12078 ± 41	−11827 ± 153
METAS	1 ± 147	26 ± 111	6217 ± 319	48 ± 112	26 ± 110	12 ± 129	27 ± 123	−4 ± 111	247 ± 185
NIM	−18 ± 102	7 ± 30	6198 ± 301	29 ± 34	7 ± 27	−7 ± 73	8 ± 62	−23 ± 33	228 ± 151
NIST		25 ± 103	6216 ± 316	47 ± 104	25 ± 102	11 ± 123	26 ± 117	−5 ± 104	246 ± 180
NPL	−25 ± 103		6191 ± 301	22 ± 38	−0 ± 33	−14 ± 76	1 ± 65	−30 ± 38	221 ± 152
NPLI	−6216 ± 316	−6191 ± 301		−6169 ± 301	−6191 ± 301	−6205 ± 308	−6190 ± 306	−6221 ± 301	−5970 ± 335
NRC	−47 ± 104	−22 ± 38	6169 ± 301		−22 ± 36	−36 ± 77	−21 ± 66	−52 ± 41	199 ± 153
PTB	−25 ± 102	0 ± 33	6191 ± 301	22 ± 36		−14 ± 74	1 ± 63	−30 ± 35	221 ± 152
SP	−11 ± 123	14 ± 76	6205 ± 308	36 ± 77	14 ± 74		15 ± 93	−16 ± 77	235 ± 166
UME	−26 ± 117	−1 ± 65	6190 ± 306	21 ± 66	−1 ± 63	−15 ± 93		−31 ± 66	220 ± 161
VNIIM	5 ± 104	30 ± 38	6221 ± 301	52 ± 41	30 ± 35	16 ± 77	31 ± 66		251 ± 153
VSL	−246 ± 180	−221 ± 152	5970 ± 335	−199 ± 153	−221 ± 152	−235 ± 166	−220 ± 161	−251 ± 153	

Nominal Ratio: 0.8 at 1 kHz, Quadrature Voltage Ratio (KCRV $\pm$ 2σ) is (-110.2 $\pm$ 4.1) x 10^{-9} of input
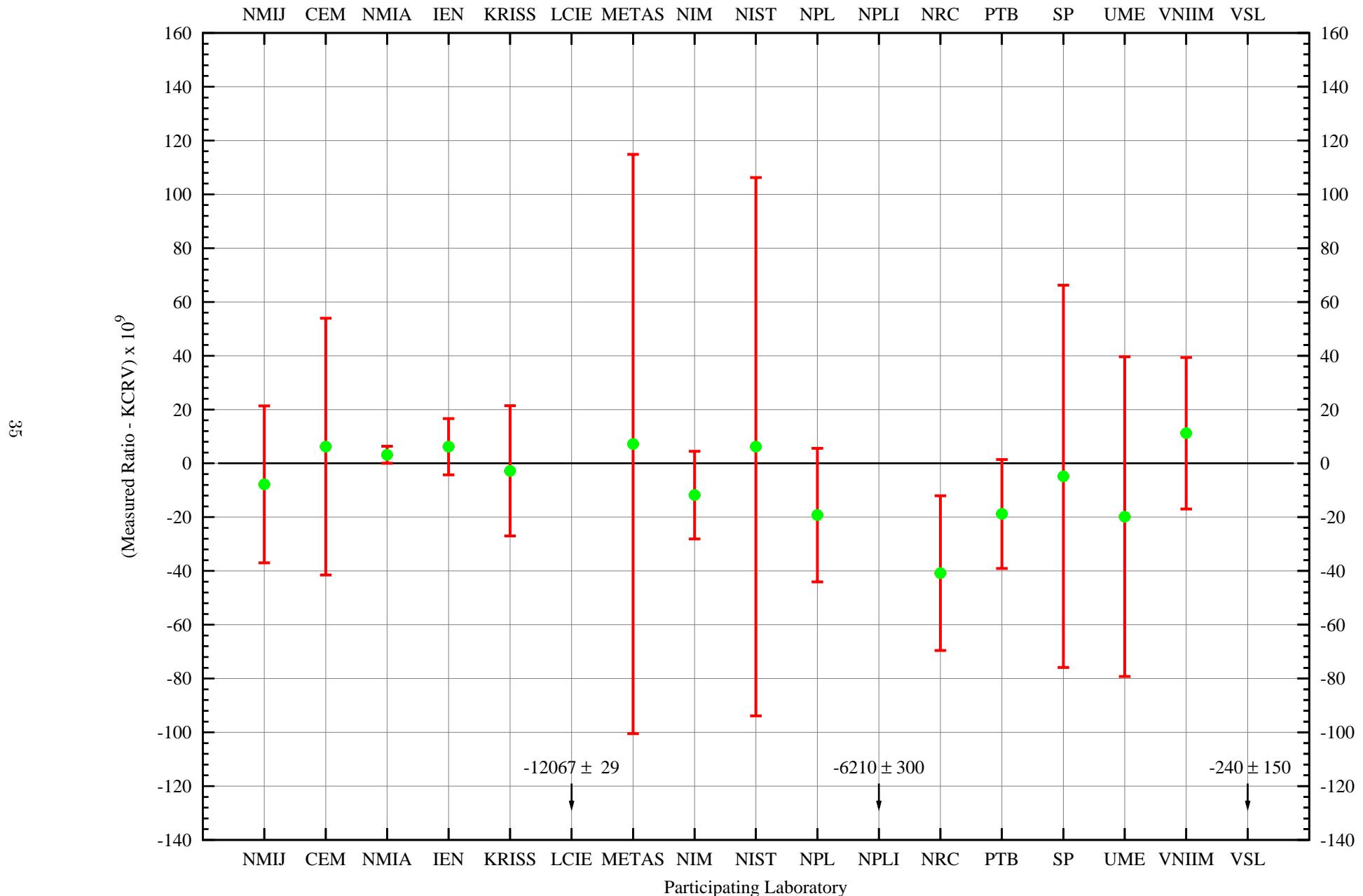
Table 24: Degree of equivalence to the KCRV for the Nominal Ratio 0.7 at 1 kHz, In-Phase Voltage Ratio (nV/V)

NMIJ	CEM	NMIA	IEN	KRISS	LCIE	METAS	NIM
22 ± 15	−31 ± 51	−1.0 ±11.4	−2 ± 17	10 ± 20	168 ± 35	−2 ± 35	−4 ± 14

NIST	NPL	NPLI	NRC	PTB	SP	UME	VNIIM	VSL
15 ± 44	−2 ± 27	23 ± 12	−22 ± 31	−17 ± 23	−17 ± 49	−19 ± 50	1 ± 21	−12 ± 32

Table 25: Laboratory - Laboratory degree of equivalence for the Nominal Ratio 0.7 at 1 kHz, In-Phase Voltage Ratio (nV/V)

	NMIJ	CEM	NMIA	IEN	KRISS	LCIE	METAS	NIM
NMIJ		53 ± 54	23 ± 20	24 ± 24	12 ± 26	−146 ± 39	24 ± 39	26 ± 22
CEM	−53 ± 54		−30 ± 53	−29 ± 55	−41 ± 56	−199 ± 63	−29 ± 63	−27 ± 54
NMIA	−23 ± 20	30 ± 53		1 ± 22	−11 ± 24	−169 ± 38	1 ± 38	3 ± 20
IEN	−24 ± 24	29 ± 55	−1 ± 22		−12 ± 28	−170 ± 40	0 ± 40	2 ± 24
KRISS	−12 ± 26	41 ± 56	11 ± 24	12 ± 28		−158 ± 41	12 ± 41	14 ± 25
LCIE	146 ± 39	199 ± 63	169 ± 38	170 ± 40	158 ± 41		170 ± 50	172 ± 38
METAS	−24 ± 39	29 ± 63	−1 ± 38	0 ± 40	−12 ± 41	−170 ± 50		2 ± 39
NIM	−26 ± 22	27 ± 54	−3 ± 20	−2 ± 24	−14 ± 25	−172 ± 38	−2 ± 39	
NIST	−7 ± 47	46 ± 68	16 ± 46	17 ± 48	5 ± 48	−153 ± 56	17 ± 57	19 ± 46
NPL	−24 ± 32	29 ± 59	−1 ± 31	0 ± 33	−12 ± 35	−170 ± 45	0 ± 45	2 ± 32
NPLI	1 ± 21	54 ± 53	24 ± 19	25 ± 23	13 ± 25	−145 ± 38	25 ± 38	27 ± 20
NRC	−44 ± 35	9 ± 60	−21 ± 34	−20 ± 36	−32 ± 37	−190 ± 47	−20 ± 47	−18 ± 35
PTB	−39 ± 28	14 ± 57	−16 ± 27	−15 ± 30	−27 ± 31	−185 ± 43	−15 ± 43	−13 ± 28
SP	−39 ± 52	14 ± 72	−16 ± 51	−15 ± 53	−27 ± 54	−185 ± 61	−15 ± 61	−13 ± 52
UME	−41 ± 52	12 ± 72	−18 ± 52	−17 ± 53	−29 ± 54	−187 ± 61	−17 ± 61	−15 ± 52
VNIIM	−21 ± 27	32 ± 56	2 ± 26	3 ± 29	−9 ± 30	−167 ± 42	3 ± 42	5 ± 27
VSL	−34 ± 36	19 ± 61	−11 ± 35	−10 ± 37	−22 ± 39	−180 ± 48	−10 ± 48	−8 ± 36

	NIST	NPL	NPLI	NRC	PTB	SP	UME	VNIIM	VSL
NMIJ	7 ± 47	24 ± 32	−1 ± 21	44 ± 35	39 ± 28	39 ± 52	41 ± 52	21 ± 27	34 ± 36
CEM	−46 ± 68	−29 ± 59	−54 ± 53	−9 ± 60	−14 ± 57	−14 ± 72	−12 ± 72	−32 ± 56	−19 ± 61
NMIA	−16 ± 46	1 ± 31	−24 ± 19	21 ± 34	16 ± 27	16 ± 51	18 ± 52	−2 ± 26	11 ± 35
IEN	−17 ± 48	−0 ± 33	−25 ± 23	20 ± 36	15 ± 30	15 ± 53	17 ± 53	−3 ± 29	10 ± 37
KRISS	−5 ± 48	12 ± 35	−13 ± 25	32 ± 37	27 ± 31	27 ± 54	29 ± 54	9 ± 30	22 ± 39
LCIE	153 ± 56	170 ± 45	145 ± 38	190 ± 47	185 ± 43	185 ± 61	187 ± 61	167 ± 42	180 ± 48
METAS	−17 ± 57	−0 ± 45	−25 ± 38	20 ± 47	15 ± 43	15 ± 61	17 ± 61	−3 ± 42	10 ± 48
NIM	−19 ± 46	−2 ± 32	−27 ± 20	18 ± 35	13 ± 28	13 ± 52	15 ± 52	−5 ± 27	8 ± 36
NIST		17 ± 52	−8 ± 46	37 ± 54	32 ± 50	32 ± 66	34 ± 67	14 ± 49	27 ± 55
NPL	−17 ± 52		−25 ± 31	20 ± 42	15 ± 37	15 ± 57	17 ± 57	−3 ± 35	10 ± 43
NPLI	8 ± 46	25 ± 31		45 ± 34	40 ± 27	40 ± 52	42 ± 52	22 ± 26	35 ± 35
NRC	−37 ± 54	−20 ± 42	−45 ± 34		−5 ± 39	−5 ± 59	−3 ± 59	−23 ± 38	−10 ± 45
PTB	−32 ± 50	−15 ± 37	−40 ± 27	5 ± 39		0 ± 55	2 ± 55	−18 ± 32	−5 ± 40
SP	−32 ± 66	−15 ± 57	−40 ± 52	5 ± 59	0 ± 55		2 ± 70	−18 ± 54	−5 ± 59
UME	−34 ± 67	−17 ± 57	−42 ± 52	3 ± 59	−2 ± 55	−2 ± 70		−20 ± 55	−7 ± 60
VNIIM	−14 ± 49	3 ± 35	−22 ± 26	23 ± 38	18 ± 32	18 ± 54	20 ± 55		13 ± 39
VSL	−27 ± 55	−10 ± 43	−35 ± 35	10 ± 45	5 ± 40	5 ± 59	7 ± 60	−13 ± 39	

Nominal Ratio: 0.7 at 1 kHz, In-Phase Voltage Ratio (KCRV ± 2σ) is (64.0 ± 5.8) x 10⁻⁹ of input
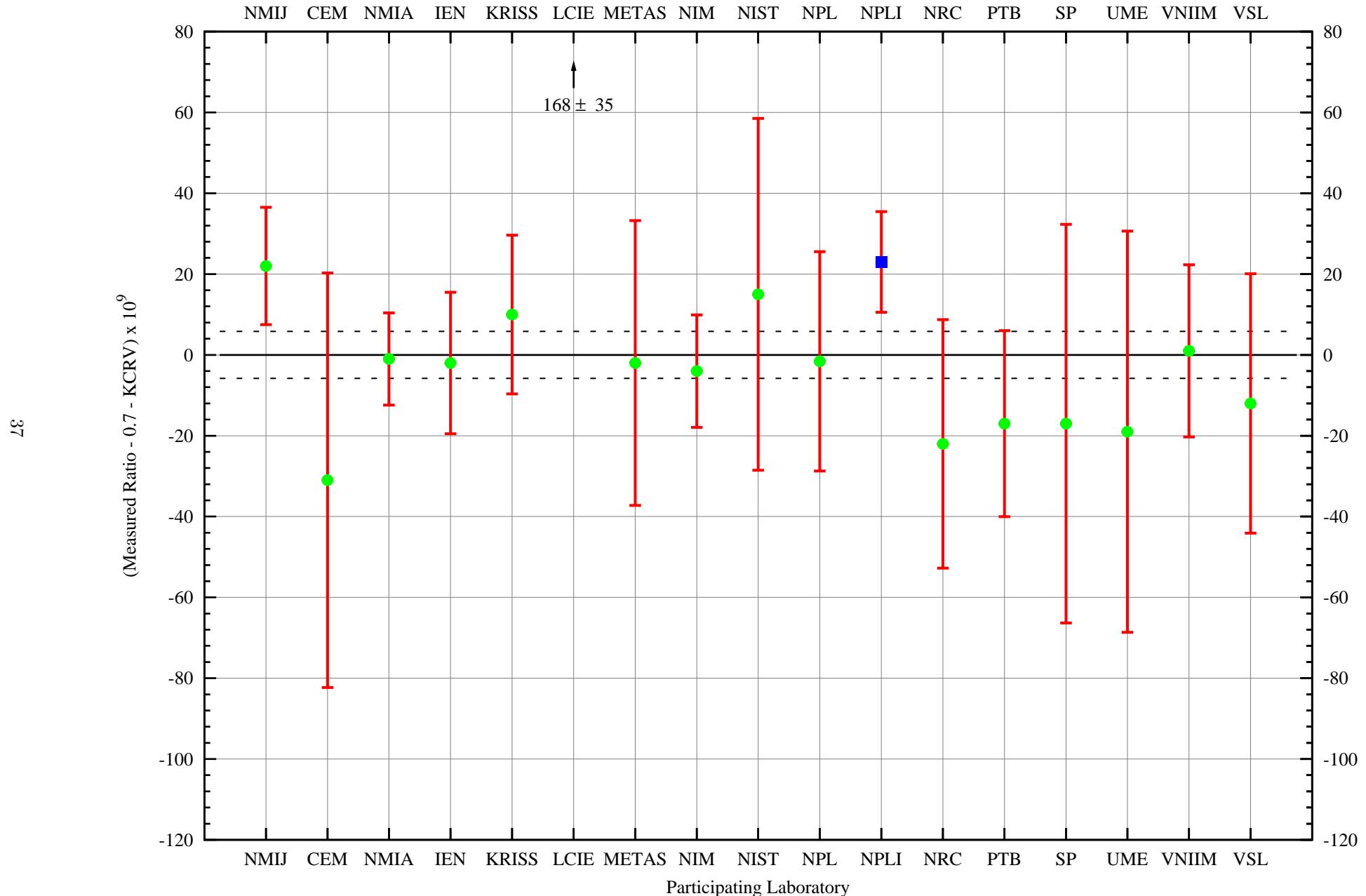
Table 26: Degree of equivalence to the KCRV for the Nominal Ratio 0.7 at 1 kHz, Quadrature Voltage Ratio (nV/V)

NMIJ	CEM	NMIA	IEN	KRISS	LCIE	METAS	NIM
−11 ± 27	8 ± 48	4.0 ± 2.5	25 ± 13	−4 ± 24	−11028 ± 33	10 ± 128	−19 ± 20

NIST	NPL	NPLI	NRC	PTB	SP	UME	VNIIM	VSL
7 ± 100	−25 ± 25	−7753 ± 300	−51 ± 29	−26 ± 20	−8 ± 71	−23 ± 59	15 ± 28	−333 ± 180

Table 27: Laboratory - Laboratory degree of equivalence for the Nominal Ratio 0.7 at 1 kHz, Quadrature Voltage Ratio (nV/V)

	NMIJ	CEM	NMIA	IEN	KRISS	LCIE	METAS	NIM
NMIJ		−19 ± 55	−15 ± 28	−36 ± 31	−7 ± 37	11017 ± 43	−21 ± 131	8 ± 34
CEM	19 ± 55		4 ± 48	−17 ± 50	12 ± 54	11036 ± 58	−2 ± 136	27 ± 52
NMIA	15 ± 28	−4 ± 48		−21 ± 15	8 ± 25	11032 ± 34	−6 ± 128	23 ± 21
IEN	36 ± 31	17 ± 50	21 ± 15		29 ± 28	11053 ± 36	15 ± 128	44 ± 25
KRISS	7 ± 37	−12 ± 54	−8 ± 25	−29 ± 28		11024 ± 41	−14 ± 130	15 ± 32
LCIE	−11017 ± 43	−11036 ± 58	−11032 ± 34	−11053 ± 36	−11024 ± 41		−11038 ± 132	−11009 ± 39
METAS	21 ± 131	2 ± 136	6 ± 128	−15 ± 128	14 ± 130	11038 ± 132		29 ± 129
NIM	−8 ± 34	−27 ± 52	−23 ± 21	−44 ± 25	−15 ± 32	11009 ± 39	−29 ± 129	
NIST	18 ± 104	−1 ± 111	3 ± 100	−18 ± 101	11 ± 103	11035 ± 106	−3 ± 162	26 ± 102
NPL	−14 ± 37	−33 ± 54	−29 ± 26	−50 ± 29	−21 ± 35	11003 ± 42	−35 ± 130	−6 ± 33
NPLI	−7742 ± 301	−7761 ± 304	−7757 ± 300	−7778 ± 300	−7749 ± 301	3275 ± 302	−7763 ± 326	−7734 ± 301
NRC	−40 ± 40	−59 ± 56	−55 ± 30	−76 ± 32	−47 ± 38	10977 ± 44	−61 ± 131	−32 ± 36
PTB	−15 ± 34	−34 ± 52	−30 ± 21	−51 ± 25	−22 ± 32	11002 ± 39	−36 ± 129	−7 ± 29
SP	3 ± 76	−16 ± 86	−12 ± 71	−33 ± 73	−4 ± 75	11020 ± 79	−18 ± 146	11 ± 74
UME	−12 ± 66	−31 ± 76	−27 ± 60	−48 ± 61	−19 ± 64	11005 ± 68	−33 ± 141	−4 ± 63
VNIIM	26 ± 40	7 ± 56	11 ± 29	−10 ± 32	19 ± 38	11043 ± 44	5 ± 131	34 ± 35
VSL	−322 ± 182	−341 ± 186	−337 ± 180	−358 ± 181	−329 ± 182	10695 ± 183	−343 ± 221	−314 ± 181

	NIST	NPL	NPLI	NRC	PTB	SP	UME	VNIIM	VSL
NMIJ	−18 ± 104	14 ± 37	7742 ± 301	40 ± 40	15 ± 34	−3 ± 76	12 ± 66	−26 ± 40	322 ± 182
CEM	1 ± 111	33 ± 54	7761 ± 304	59 ± 56	34 ± 52	16 ± 86	31 ± 76	−7 ± 56	341 ± 186
NMIA	−3 ± 100	29 ± 26	7757 ± 300	55 ± 30	30 ± 21	12 ± 71	27 ± 60	−11 ± 29	337 ± 180
IEN	18 ± 101	50 ± 29	7778 ± 300	76 ± 32	51 ± 25	33 ± 73	48 ± 61	10 ± 32	358 ± 181
KRISS	−11 ± 103	21 ± 35	7749 ± 301	47 ± 38	22 ± 32	4 ± 75	19 ± 64	−19 ± 38	329 ± 182
LCIE	−11035 ± 106	−11003 ± 42	−3275 ± 302	−10977 ± 44	−11002 ± 39	−11020 ± 79	−11005 ± 68	−11043 ± 44	−10695 ± 183
METAS	3 ± 162	35 ± 130	7763 ± 326	61 ± 131	36 ± 129	18 ± 146	33 ± 141	−5 ± 131	343 ± 221
NIM	−26 ± 102	6 ± 33	7734 ± 301	32 ± 36	7 ± 29	−11 ± 74	4 ± 63	−34 ± 35	314 ± 181
NIST		32 ± 103	7760 ± 316	58 ± 104	33 ± 102	15 ± 123	30 ± 117	−8 ± 104	340 ± 206
NPL	−32 ± 103		7728 ± 301	26 ± 38	1 ± 33	−17 ± 76	−2 ± 65	−40 ± 38	308 ± 182
NPLI	−7760 ± 316	−7728 ± 301		−7702 ± 301	−7727 ± 301	−7745 ± 308	−7730 ± 306	−7768 ± 301	−7420 ± 350
NRC	−58 ± 104	−26 ± 38	7702 ± 301		−25 ± 36	−43 ± 77	−28 ± 66	−66 ± 41	282 ± 182
PTB	−33 ± 102	−1 ± 33	7727 ± 301	25 ± 36		−18 ± 74	−3 ± 63	−41 ± 35	307 ± 181
SP	−15 ± 123	17 ± 76	7745 ± 308	43 ± 77	18 ± 74		15 ± 93	−23 ± 77	325 ± 194
UME	−30 ± 117	2 ± 65	7730 ± 306	28 ± 66	3 ± 63	−15 ± 93		−38 ± 66	310 ± 190
VNIIM	8 ± 104	40 ± 38	7768 ± 301	66 ± 41	41 ± 35	23 ± 77	38 ± 66		348 ± 182
VSL	−340 ± 206	−308 ± 182	7420 ± 350	−282 ± 182	−307 ± 181	−325 ± 194	−310 ± 190	−348 ± 182	

Nominal Ratio: 0.7 at 1 kHz, Quadrature Voltage Ratio (KCRV ± 2σ) is (-137.0 ± 4.5) x 10^{-9} of input

-11028 ± 33

-7753 ± 300

-333 ± 180

(Measured Ratio - KCRV) x 10^9

Participating Laboratory

NMIJ   CEM   NMIA   IEN   KRISS   LCIE   METAS   NIM   NIST   NPL   NPLI   NRC   PTB   SP   UME   VNIIM   VSL

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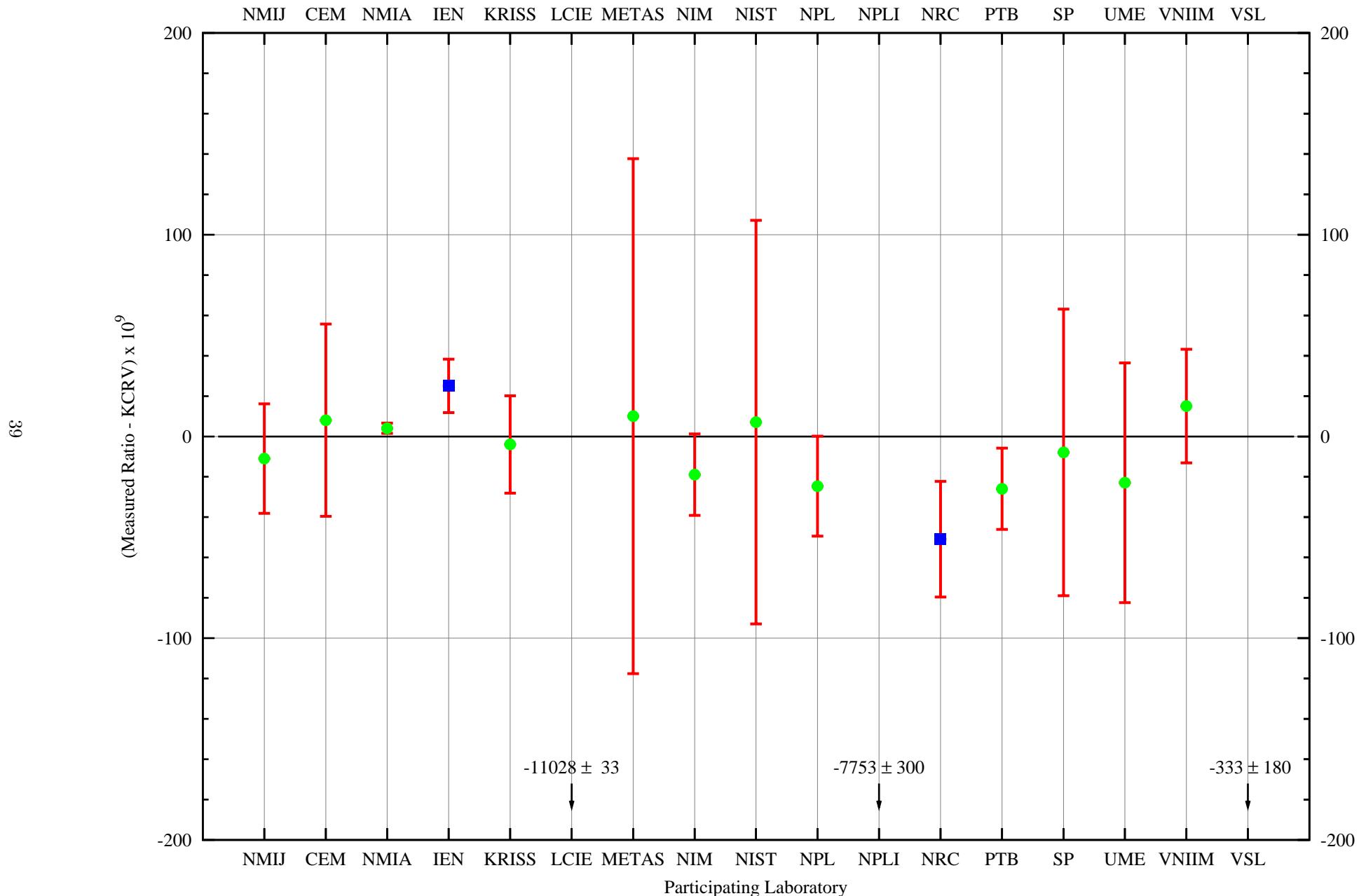
Table 28: Degree of equivalence to the KCRV for the Nominal Ratio 0.6 at 1 kHz, In-Phase Voltage Ratio (nV/V)

NMIJ	CEM	NMIA	IEN	KRISS	LCIE	METAS	NIM
16 ± 13	−35 ± 51	0.0 ±11.5	−6 ± 16	7 ± 20	179 ± 37	−5 ± 33	4 ± 14

NIST	NPL	NPLI	NRC	PTB	SP	UME	VNIIM	VSL
15 ± 44	−2 ± 27	30 ± 12	−24 ± 31	−19 ± 23	−15 ± 49	−14 ± 50	0 ± 21	−10 ± 37

Table 29: Laboratory - Laboratory degree of equivalence for the Nominal Ratio 0.6 at 1 kHz, In-Phase Voltage Ratio (nV/V)

	NMIJ	CEM	NMIA	IEN	KRISS	LCIE	METAS	NIM
NMIJ		51 ± 54	16 ± 19	22 ± 22	9 ± 25	−163 ± 40	21 ± 37	12 ± 21
CEM	−51 ± 54		−35 ± 53	−29 ± 54	−42 ± 56	−214 ± 64	−30 ± 62	−39 ± 54
NMIA	−16 ± 19	35 ± 53		6 ± 21	−7 ± 24	−179 ± 39	5 ± 36	−4 ± 20
IEN	−22 ± 22	29 ± 54	−6 ± 21		−13 ± 26	−185 ± 41	−1 ± 38	−10 ± 22
KRISS	−9 ± 25	42 ± 56	7 ± 24	13 ± 26		−172 ± 43	12 ± 40	3 ± 25
LCIE	163 ± 40	214 ± 64	179 ± 39	185 ± 41	172 ± 43		184 ± 50	175 ± 40
METAS	−21 ± 37	30 ± 62	−5 ± 36	1 ± 38	−12 ± 40	−184 ± 50		−9 ± 37
NIM	−12 ± 21	39 ± 54	4 ± 20	10 ± 22	−3 ± 25	−175 ± 40	9 ± 37	
NIST	−1 ± 46	50 ± 68	15 ± 46	21 ± 47	8 ± 48	−164 ± 58	20 ± 55	11 ± 46
NPL	−18 ± 31	33 ± 59	−2 ± 31	4 ± 32	−9 ± 35	−181 ± 46	3 ± 44	−6 ± 32
NPLI	14 ± 20	65 ± 53	30 ± 19	36 ± 22	23 ± 25	−149 ± 40	35 ± 37	26 ± 20
NRC	−40 ± 35	11 ± 60	−24 ± 34	−18 ± 35	−31 ± 37	−203 ± 49	−19 ± 46	−28 ± 35
PTB	−35 ± 28	16 ± 57	−19 ± 27	−13 ± 29	−26 ± 31	−198 ± 44	−14 ± 41	−23 ± 28
SP	−31 ± 52	20 ± 72	−15 ± 51	−9 ± 52	−22 ± 54	−194 ± 62	−10 ± 60	−19 ± 52
UME	−30 ± 52	21 ± 72	−14 ± 52	−8 ± 53	−21 ± 54	−193 ± 62	−9 ± 60	−18 ± 52
VNIIM	−16 ± 26	35 ± 56	0 ± 26	6 ± 28	−7 ± 30	−179 ± 43	5 ± 40	−4 ± 27
VSL	−26 ± 40	25 ± 64	−10 ± 39	−4 ± 41	−17 ± 43	−189 ± 53	−5 ± 50	−14 ± 40

	NIST	NPL	NPLI	NRC	PTB	SP	UME	VNIIM	VSL
NMIJ	1 ± 46	18 ± 31	−14 ± 20	40 ± 35	35 ± 28	31 ± 52	30 ± 52	16 ± 26	26 ± 40
CEM	−50 ± 68	−33 ± 59	−65 ± 53	−11 ± 60	−16 ± 57	−20 ± 72	−21 ± 72	−35 ± 56	−25 ± 64
NMIA	−15 ± 46	2 ± 31	−30 ± 19	24 ± 34	19 ± 27	15 ± 51	14 ± 52	0 ± 26	10 ± 39
IEN	−21 ± 47	−4 ± 32	−36 ± 22	18 ± 35	13 ± 29	9 ± 52	8 ± 53	−6 ± 28	4 ± 41
KRISS	−8 ± 48	9 ± 35	−23 ± 25	31 ± 37	26 ± 31	22 ± 54	21 ± 54	7 ± 30	17 ± 43
LCIE	164 ± 58	181 ± 46	149 ± 40	203 ± 49	198 ± 44	194 ± 62	193 ± 62	179 ± 43	189 ± 53
METAS	−20 ± 55	−3 ± 44	−35 ± 37	19 ± 46	14 ± 41	10 ± 60	9 ± 60	−5 ± 40	5 ± 50
NIM	−11 ± 46	6 ± 32	−26 ± 20	28 ± 35	23 ± 28	19 ± 52	18 ± 52	4 ± 27	14 ± 40
NIST		17 ± 52	−15 ± 46	39 ± 54	34 ± 50	30 ± 66	29 ± 67	15 ± 49	25 ± 58
NPL	−17 ± 52		−32 ± 31	22 ± 42	17 ± 37	13 ± 57	12 ± 57	−2 ± 35	8 ± 46
NPLI	15 ± 46	32 ± 31		54 ± 34	49 ± 27	45 ± 52	44 ± 52	30 ± 26	40 ± 40
NRC	−39 ± 54	−22 ± 42	−54 ± 34		−5 ± 39	−9 ± 59	−10 ± 59	−24 ± 38	−14 ± 49
PTB	−34 ± 50	−17 ± 37	−49 ± 27	5 ± 39		−4 ± 55	−5 ± 55	−19 ± 32	−9 ± 44
SP	−30 ± 66	−13 ± 57	−45 ± 52	9 ± 59	4 ± 55		−1 ± 70	−15 ± 54	−5 ± 62
UME	−29 ± 67	−12 ± 57	−44 ± 52	10 ± 59	5 ± 55	1 ± 70		−14 ± 55	−4 ± 62
VNIIM	−15 ± 49	2 ± 35	−30 ± 26	24 ± 38	19 ± 32	15 ± 54	14 ± 55		10 ± 43
VSL	−25 ± 58	−8 ± 46	−40 ± 40	14 ± 49	9 ± 44	5 ± 62	4 ± 62	−10 ± 43	

Nominal Ratio: 0.6 at 1 kHz, In-Phase Voltage Ratio (KCRV $\pm$ 2σ) is (39.0 $\pm$ 5.7) x 10^{-9} of input

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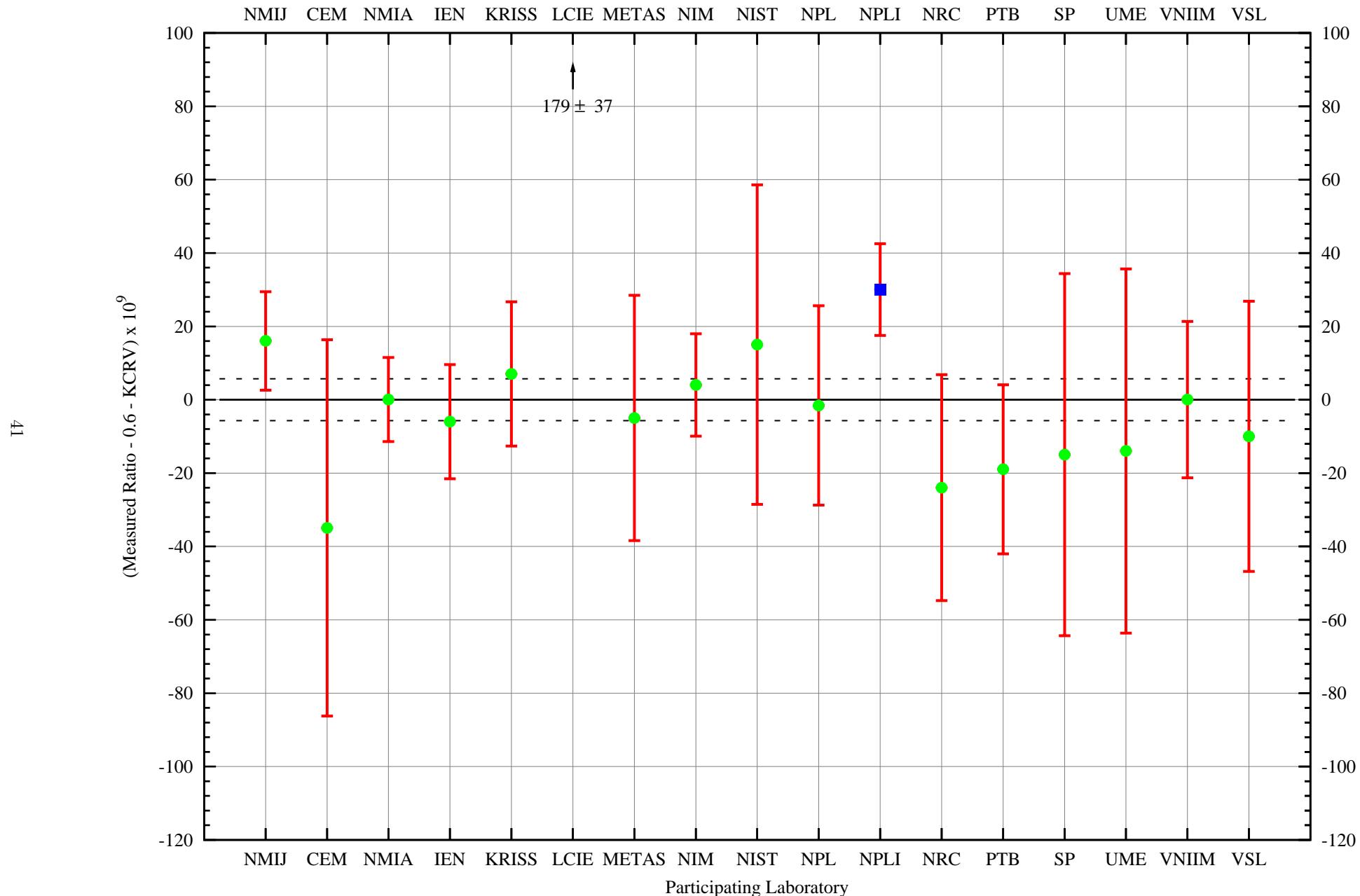
Table 30: Degree of equivalence to the KCRV for the Nominal Ratio 0.6 at 1 kHz, Quadrature Voltage Ratio (nV/V)

NMIJ	CEM	NMIA	IEN	KRISS	LCIE	METAS	NIM
−13 ± 24	10 ± 48	1.5 ± 2.7	11 ± 14	−7 ± 24	−7593 ± 35	10 ± 129	−22 ± 20

NIST	NPL	NPLI	NRC	PTB	SP	UME	VNIIM	VSL
7 ± 120	−30 ± 25	−8728 ± 300	−57 ± 29	−31 ± 20	−1 ± 71	−22 ± 59	18 ± 28	−388 ± 210

Table 31: Laboratory - Laboratory degree of equivalence for the Nominal Ratio 0.6 at 1 kHz, Quadrature Voltage Ratio (nV/V)

	NMIJ	CEM	NMIA	IEN	KRISS	LCIE	METAS	NIM
NMIJ		−23 ± 54	−14 ± 25	−24 ± 29	−6 ± 35	7580 ± 43	−23 ± 132	9 ± 32
CEM	23 ± 54		9 ± 48	−1 ± 50	17 ± 54	7603 ± 60	0 ± 138	32 ± 52
NMIA	14 ± 25	−9 ± 48		−10 ± 16	8 ± 25	7594 ± 36	−9 ± 129	23 ± 21
IEN	24 ± 29	1 ± 50	10 ± 16		18 ± 29	7604 ± 38	1 ± 130	33 ± 26
KRISS	6 ± 35	−17 ± 54	−8 ± 25	−18 ± 29		7586 ± 43	−17 ± 132	15 ± 32
LCIE	−7580 ± 43	−7603 ± 60	−7594 ± 36	−7604 ± 38	−7586 ± 43		−7603 ± 134	−7571 ± 41
METAS	23 ± 132	0 ± 138	9 ± 129	−1 ± 130	17 ± 132	7603 ± 134		32 ± 131
NIM	−9 ± 32	−32 ± 52	−23 ± 21	−33 ± 26	−15 ± 32	7571 ± 41	−32 ± 131	
NIST	20 ± 123	−3 ± 129	6 ± 120	−4 ± 121	14 ± 123	7600 ± 125	−3 ± 176	29 ± 122
NPL	−17 ± 35	−40 ± 54	−31 ± 26	−41 ± 29	−23 ± 35	7563 ± 43	−40 ± 132	−8 ± 33
NPLI	−8715 ± 301	−8738 ± 304	−8729 ± 300	−8739 ± 300	−8721 ± 301	−1135 ± 302	−8738 ± 327	−8706 ± 301
NRC	−44 ± 38	−67 ± 56	−58 ± 30	−68 ± 33	−50 ± 38	7536 ± 46	−67 ± 132	−35 ± 36
PTB	−18 ± 32	−41 ± 52	−32 ± 21	−42 ± 26	−24 ± 32	7562 ± 41	−41 ± 131	−9 ± 29
SP	12 ± 75	−11 ± 86	−2 ± 71	−12 ± 73	6 ± 75	7592 ± 79	−11 ± 148	21 ± 74
UME	−9 ± 64	−32 ± 76	−23 ± 60	−33 ± 61	−15 ± 64	7571 ± 69	−32 ± 142	0 ± 63
VNIIM	31 ± 38	8 ± 56	17 ± 29	7 ± 32	25 ± 38	7611 ± 45	8 ± 132	40 ± 35
VSL	−375 ± 211	−398 ± 215	−389 ± 210	−399 ± 211	−381 ± 211	7205 ± 213	−398 ± 247	−366 ± 211

	NIST	NPL	NPLI	NRC	PTB	SP	UME	VNIIM	VSL
NMIJ	−20 ± 123	17 ± 35	8715 ± 301	44 ± 38	18 ± 32	−12 ± 75	9 ± 64	−31 ± 38	375 ± 211
CEM	3 ± 129	40 ± 54	8738 ± 304	67 ± 56	41 ± 52	11 ± 86	32 ± 76	−8 ± 56	398 ± 215
NMIA	−6 ± 120	31 ± 26	8729 ± 300	58 ± 30	32 ± 21	2 ± 71	23 ± 60	−17 ± 29	389 ± 210
IEN	4 ± 121	41 ± 29	8739 ± 300	68 ± 33	42 ± 26	12 ± 73	33 ± 61	−7 ± 32	399 ± 211
KRISS	−14 ± 123	23 ± 35	8721 ± 301	50 ± 38	24 ± 32	−6 ± 75	15 ± 64	−25 ± 38	381 ± 211
LCIE	−7600 ± 125	−7563 ± 43	1135 ± 302	−7536 ± 46	−7562 ± 41	−7592 ± 79	−7571 ± 69	−7611 ± 45	−7205 ± 213
METAS	3 ± 176	40 ± 132	8738 ± 327	67 ± 132	41 ± 131	11 ± 148	32 ± 142	−8 ± 132	398 ± 247
NIM	−29 ± 122	8 ± 33	8706 ± 301	35 ± 36	9 ± 29	−21 ± 74	0 ± 63	−40 ± 35	366 ± 211
NIST		37 ± 123	8735 ± 323	64 ± 124	38 ± 122	8 ± 140	29 ± 134	−11 ± 123	395 ± 242
NPL	−37 ± 123		8698 ± 301	27 ± 38	1 ± 33	−29 ± 76	−8 ± 65	−48 ± 38	358 ± 212
NPLI	−8735 ± 323	−8698 ± 301		−8671 ± 301	−8697 ± 301	−8727 ± 308	−8706 ± 306	−8746 ± 301	−8340 ± 366
NRC	−64 ± 124	−27 ± 38	8671 ± 301		−26 ± 36	−56 ± 77	−35 ± 66	−75 ± 41	331 ± 212
PTB	−38 ± 122	−1 ± 33	8697 ± 301	26 ± 36		−30 ± 74	−9 ± 63	−49 ± 35	357 ± 211
SP	−8 ± 140	29 ± 76	8727 ± 308	56 ± 77	30 ± 74		21 ± 93	−19 ± 77	387 ± 222
UME	−29 ± 134	8 ± 65	8706 ± 306	35 ± 66	9 ± 63	−21 ± 93		−40 ± 66	366 ± 218
VNIIM	11 ± 123	48 ± 38	8746 ± 301	75 ± 41	49 ± 35	19 ± 77	40 ± 66		406 ± 212
VSL	−395 ± 242	−358 ± 212	8340 ± 366	−331 ± 212	−357 ± 211	−387 ± 222	−366 ± 218	−406 ± 212	

Nominal Ratio: 0.6 at 1 kHz, Quadrature Voltage Ratio (KCRV ± 2σ) is (-132.5 ± 4.4) x 10^{-9} of input
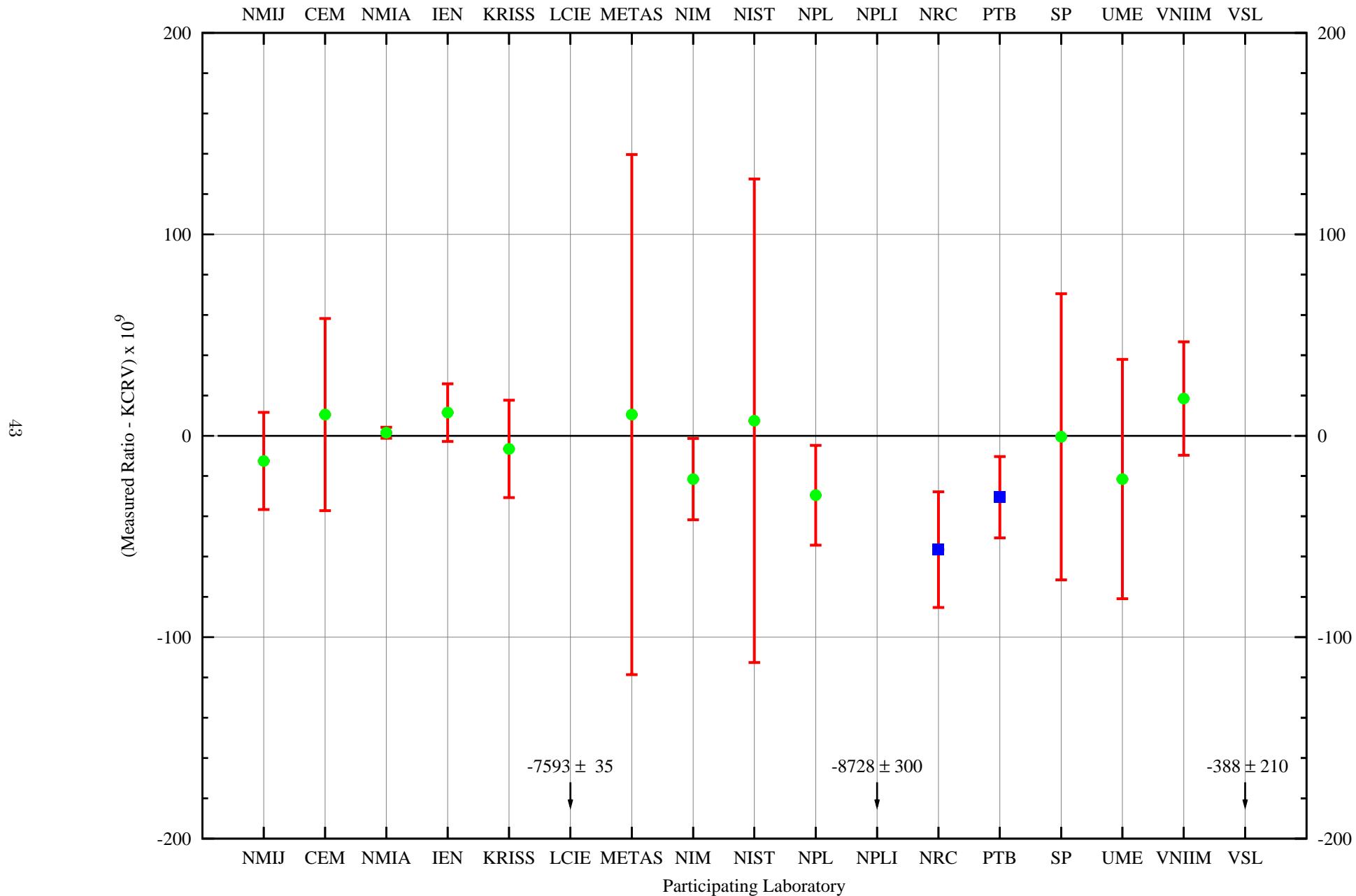
Table 32: Degree of equivalence to the KCRV for the Nominal Ratio 0.5 at 1 kHz, In-Phase Voltage Ratio (nV/V)

NMIJ	CEM	NMIA	IEN	KRISS	LCIE	METAS	NIM
7 ± 13	−35 ± 51	2.2 ±11.6	−6 ± 14	3 ± 20	75 ± 38	−7 ± 30	0 ± 12

NIST	NPL	NPLI	NRC	PTB	SP	UME	VNIIM	VSL
6 ± 45	−0 ± 27	33 ± 13	−23 ± 31	−18 ± 23	1 ± 49	−11 ± 50	−2 ± 21	−8 ± 43

Table 33: Laboratory - Laboratory degree of equivalence for the Nominal Ratio 0.5 at 1 kHz, In-Phase Voltage Ratio (nV/V)

	NMIJ	CEM	NMIA	IEN	KRISS	LCIE	METAS	NIM
NMIJ		42 ± 53	5 ± 19	13 ± 20	4 ± 25	−68 ± 41	14 ± 33	7 ± 19
CEM	−42 ± 53		−37 ± 53	−29 ± 54	−38 ± 56	−110 ± 64	−28 ± 60	−35 ± 53
NMIA	−5 ± 19	37 ± 53		8 ± 19	−1 ± 24	−73 ± 40	9 ± 33	2 ± 19
IEN	−13 ± 20	29 ± 54	−8 ± 19		−9 ± 25	−81 ± 41	1 ± 34	−6 ± 20
KRISS	−4 ± 25	38 ± 56	1 ± 24	9 ± 25		−72 ± 43	10 ± 36	3 ± 24
LCIE	68 ± 41	110 ± 64	73 ± 40	81 ± 41	72 ± 43		82 ± 49	75 ± 40
METAS	−14 ± 33	28 ± 60	−9 ± 33	−1 ± 34	−10 ± 36	−82 ± 49		−7 ± 33
NIM	−7 ± 19	35 ± 53	−2 ± 19	6 ± 20	−3 ± 24	−75 ± 40	7 ± 33	
NIST	−1 ± 47	41 ± 68	4 ± 47	12 ± 47	3 ± 49	−69 ± 59	13 ± 54	6 ± 47
NPL	−7 ± 31	35 ± 59	−2 ± 31	6 ± 31	−3 ± 35	−75 ± 47	7 ± 41	−0 ± 31
NPLI	26 ± 19	68 ± 53	31 ± 19	39 ± 20	30 ± 25	−42 ± 41	40 ± 33	33 ± 19
NRC	−30 ± 34	12 ± 60	−25 ± 34	−17 ± 35	−26 ± 37	−98 ± 49	−16 ± 43	−23 ± 34
PTB	−25 ± 27	17 ± 57	−20 ± 27	−12 ± 28	−21 ± 31	−93 ± 45	−11 ± 38	−18 ± 27
SP	−6 ± 52	36 ± 72	−1 ± 51	7 ± 52	−2 ± 54	−74 ± 63	8 ± 58	1 ± 51
UME	−18 ± 52	24 ± 72	−13 ± 52	−5 ± 52	−14 ± 54	−86 ± 63	−4 ± 58	−11 ± 52
VNIIM	−9 ± 26	33 ± 56	−4 ± 26	4 ± 27	−5 ± 30	−77 ± 44	5 ± 37	−2 ± 26
VSL	−15 ± 45	27 ± 67	−10 ± 45	−2 ± 45	−11 ± 48	−83 ± 57	−1 ± 52	−8 ± 45

	NIST	NPL	NPLI	NRC	PTB	SP	UME	VNIIM	VSL
NMIJ	1 ± 47	7 ± 31	−26 ± 19	30 ± 34	25 ± 27	6 ± 52	18 ± 52	9 ± 26	15 ± 45
CEM	−41 ± 68	−35 ± 59	−68 ± 53	−12 ± 60	−17 ± 57	−36 ± 72	−24 ± 72	−33 ± 56	−27 ± 67
NMIA	−4 ± 47	2 ± 31	−31 ± 19	25 ± 34	20 ± 27	1 ± 51	13 ± 52	4 ± 26	10 ± 45
IEN	−12 ± 47	−6 ± 31	−39 ± 20	17 ± 35	12 ± 28	−7 ± 52	5 ± 52	−4 ± 27	2 ± 45
KRISS	−3 ± 49	3 ± 35	−30 ± 25	26 ± 37	21 ± 31	2 ± 54	14 ± 54	5 ± 30	11 ± 48
LCIE	69 ± 59	75 ± 47	42 ± 41	98 ± 49	93 ± 45	74 ± 63	86 ± 63	77 ± 44	83 ± 57
METAS	−13 ± 54	−7 ± 41	−40 ± 33	16 ± 43	11 ± 38	−8 ± 58	4 ± 58	−5 ± 37	1 ± 52
NIM	−6 ± 47	0 ± 31	−33 ± 19	23 ± 34	18 ± 27	−1 ± 51	11 ± 52	2 ± 26	8 ± 45
NIST		6 ± 53	−27 ± 47	29 ± 55	24 ± 51	5 ± 67	17 ± 67	8 ± 50	14 ± 62
NPL	−6 ± 53		−33 ± 31	23 ± 42	18 ± 37	−1 ± 57	11 ± 57	2 ± 35	8 ± 51
NPLI	27 ± 47	33 ± 31		56 ± 34	51 ± 27	32 ± 52	44 ± 52	35 ± 26	41 ± 45
NRC	−29 ± 55	−23 ± 42	−56 ± 34		−5 ± 39	−24 ± 59	−12 ± 59	−21 ± 38	−15 ± 53
PTB	−24 ± 51	−18 ± 37	−51 ± 27	5 ± 39		−19 ± 55	−7 ± 55	−16 ± 32	−10 ± 49
SP	−5 ± 67	1 ± 57	−32 ± 52	24 ± 59	19 ± 55		12 ± 70	3 ± 54	9 ± 66
UME	−17 ± 67	−11 ± 57	−44 ± 52	12 ± 59	7 ± 55	−12 ± 70		−9 ± 55	−3 ± 66
VNIIM	−8 ± 50	−2 ± 35	−35 ± 26	21 ± 38	16 ± 32	−3 ± 54	9 ± 55		6 ± 48
VSL	−14 ± 62	−8 ± 51	−41 ± 45	15 ± 53	10 ± 49	−9 ± 66	3 ± 66	−6 ± 48	

Nominal Ratio: 0.5 at 1 kHz, In-Phase Voltage Ratio (KCRV $\pm$ 2σ) is (9.8 $\pm$ 5.4) x 10^{-9} of input
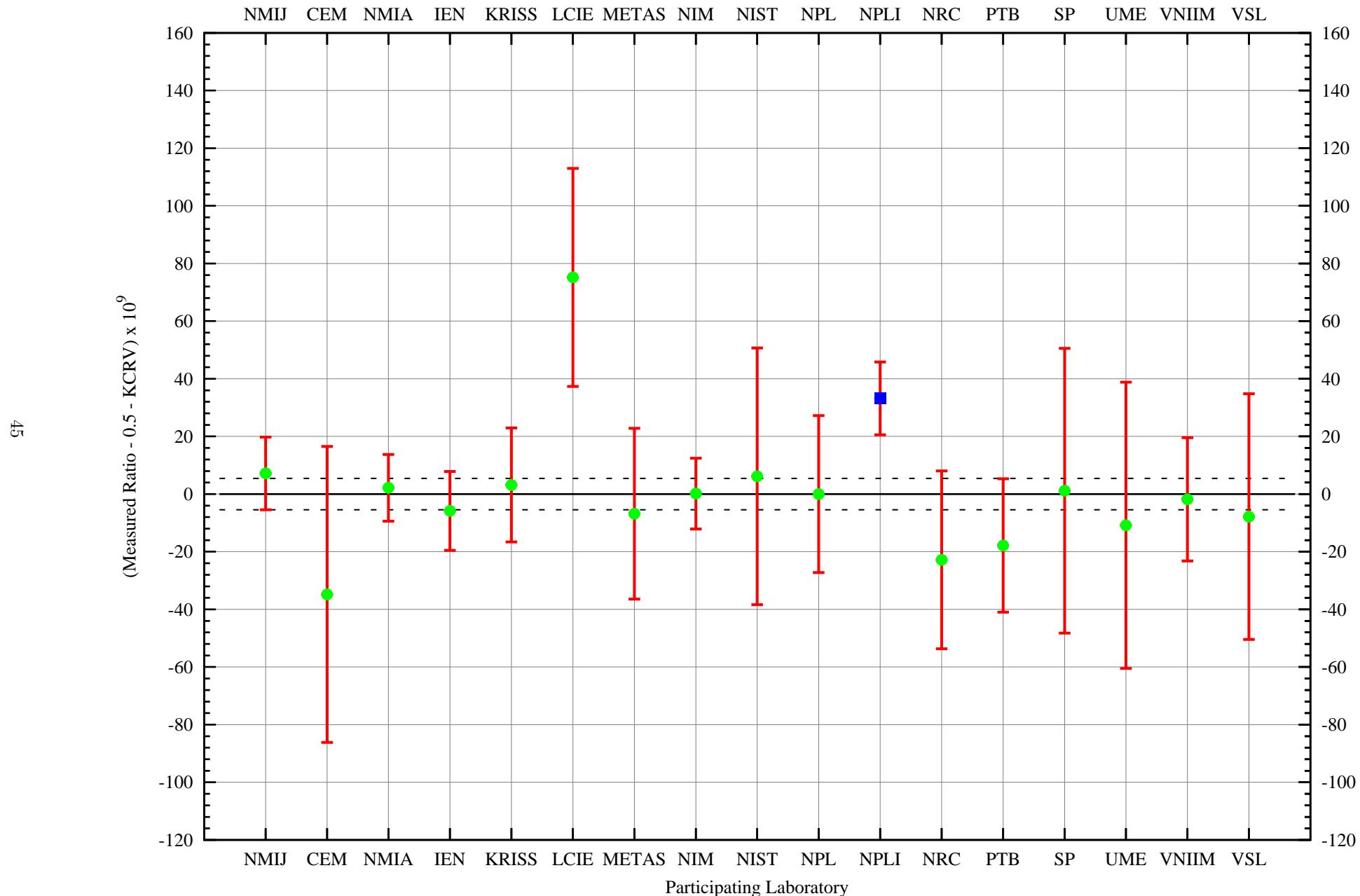
Table 34: Degree of equivalence to the KCRV for the Nominal Ratio 0.5 at 1 kHz, Quadrature Voltage Ratio (nV/V)

NMIJ	CEM	NMIA	IEN	KRISS	LCIE	METAS	NIM
-13 ± 21	13 ± 48	0.3 ± 2.6	10 ± 14	-6 ± 24	-3293 ± 36	12 ± 123	-28 ± 16

NIST	NPL	NPLI	NRC	PTB	SP	UME	VNIIM	VSL
4 ± 110	-30 ± 25	-9080 ± 300	-56 ± 29	-31 ± 20	10 ± 71	-22 ± 59	20 ± 28	-390 ± 230

Table 35: Laboratory - Laboratory degree of equivalence for the Nominal Ratio 0.5 at 1 kHz, Quadrature Voltage Ratio (nV/V)

	NMIJ	CEM	NMIA	IEN	KRISS	LCIE	METAS	NIM
NMIJ		-26 ± 53	-13 ± 22	-23 ± 26	-7 ± 33	3280 ± 42	-25 ± 125	15 ± 27
CEM	26 ± 53		13 ± 48	3 ± 50	19 ± 54	3306 ± 60	1 ± 132	41 ± 51
NMIA	13 ± 22	-13 ± 48		-10 ± 16	6 ± 25	3293 ± 37	-12 ± 123	28 ± 18
IEN	23 ± 26	-3 ± 50	10 ± 16		16 ± 29	3303 ± 39	-2 ± 124	38 ± 23
KRISS	7 ± 33	-19 ± 54	-6 ± 25	-16 ± 29		3287 ± 44	-18 ± 125	22 ± 30
LCIE	-3280 ± 42	-3306 ± 60	-3293 ± 37	-3303 ± 39	-3287 ± 44		-3305 ± 128	-3265 ± 40
METAS	25 ± 125	-1 ± 132	12 ± 123	2 ± 124	18 ± 125	3305 ± 128		40 ± 124
NIM	-15 ± 27	-41 ± 51	-28 ± 18	-38 ± 23	-22 ± 30	3265 ± 40	-40 ± 124	
NIST	17 ± 112	-9 ± 120	4 ± 110	-6 ± 111	10 ± 113	3297 ± 116	-8 ± 165	32 ± 111
NPL	-18 ± 33	-44 ± 54	-31 ± 26	-41 ± 29	-25 ± 35	3262 ± 44	-43 ± 125	-3 ± 30
NPLI	-9067 ± 301	-9093 ± 304	-9080 ± 300	-9090 ± 300	-9074 ± 301	-5787 ± 302	-9092 ± 324	-9052 ± 301
NRC	-43 ± 36	-69 ± 56	-56 ± 30	-66 ± 33	-50 ± 38	3237 ± 47	-68 ± 126	-28 ± 34
PTB	-18 ± 30	-44 ± 52	-31 ± 21	-41 ± 26	-25 ± 32	3262 ± 42	-43 ± 124	-3 ± 27
SP	23 ± 74	-3 ± 86	10 ± 71	0 ± 73	16 ± 75	3303 ± 80	-2 ± 142	38 ± 73
UME	-9 ± 63	-35 ± 76	-22 ± 60	-32 ± 61	-16 ± 64	3271 ± 70	-34 ± 136	6 ± 62
VNIIM	33 ± 36	7 ± 56	20 ± 29	10 ± 32	26 ± 38	3313 ± 46	8 ± 126	48 ± 33
VSL	-377 ± 231	-403 ± 235	-390 ± 230	-400 ± 231	-384 ± 231	2903 ± 233	-402 ± 261	-362 ± 231

	NIST	NPL	NPLI	NRC	PTB	SP	UME	VNIIM	VSL
NMIJ	-17 ± 112	18 ± 33	9067 ± 301	43 ± 36	18 ± 30	-23 ± 74	9 ± 63	-33 ± 36	377 ± 231
CEM	9 ± 120	44 ± 54	9093 ± 304	69 ± 56	44 ± 52	3 ± 86	35 ± 76	-7 ± 56	403 ± 235
NMIA	-4 ± 110	31 ± 26	9080 ± 300	56 ± 30	31 ± 21	-10 ± 71	22 ± 60	-20 ± 29	390 ± 230
IEN	6 ± 111	41 ± 29	9090 ± 300	66 ± 33	41 ± 26	0 ± 73	32 ± 61	-10 ± 32	400 ± 231
KRISS	-10 ± 113	25 ± 35	9074 ± 301	50 ± 38	25 ± 32	-16 ± 75	16 ± 64	-26 ± 38	384 ± 231
LCIE	-3297 ± 116	-3262 ± 44	5787 ± 302	-3237 ± 47	-3262 ± 42	-3303 ± 80	-3271 ± 70	-3313 ± 46	-2903 ± 233
METAS	8 ± 165	43 ± 125	9092 ± 324	68 ± 126	43 ± 124	2 ± 142	34 ± 136	-8 ± 126	402 ± 261
NIM	-32 ± 111	3 ± 30	9052 ± 301	28 ± 34	3 ± 27	-38 ± 73	-6 ± 62	-48 ± 33	362 ± 231
NIST		35 ± 113	9084 ± 320	60 ± 114	35 ± 112	-6 ± 131	26 ± 125	-16 ± 114	394 ± 255
NPL	-35 ± 113		9049 ± 301	25 ± 38	0 ± 33	-41 ± 76	-9 ± 65	-51 ± 38	359 ± 231
NPLI	-9084 ± 320	-9049 ± 301		-9024 ± 301	-9049 ± 301	-9090 ± 308	-9058 ± 306	-9100 ± 301	-8690 ± 378
NRC	-60 ± 114	-25 ± 38	9024 ± 301		-25 ± 36	-66 ± 77	-34 ± 66	-76 ± 41	334 ± 232
PTB	-35 ± 112	-0 ± 33	9049 ± 301	25 ± 36		-41 ± 74	-9 ± 63	-51 ± 35	359 ± 231
SP	6 ± 131	41 ± 76	9090 ± 308	66 ± 77	41 ± 74		32 ± 93	-10 ± 77	400 ± 241
UME	-26 ± 125	9 ± 65	9058 ± 306	34 ± 66	9 ± 63	-32 ± 93		-42 ± 66	368 ± 238
VNIIM	16 ± 114	51 ± 38	9100 ± 301	76 ± 41	51 ± 35	10 ± 77	42 ± 66		410 ± 232
VSL	-394 ± 255	-359 ± 231	8690 ± 378	-334 ± 232	-359 ± 231	-400 ± 241	-368 ± 238	-410 ± 232	

Nominal Ratio: 0.5 at 1 kHz, Quadrature Voltage Ratio (KCRV ± 2σ) is (-130.3 ± 4.5) x 10^{-9} of input
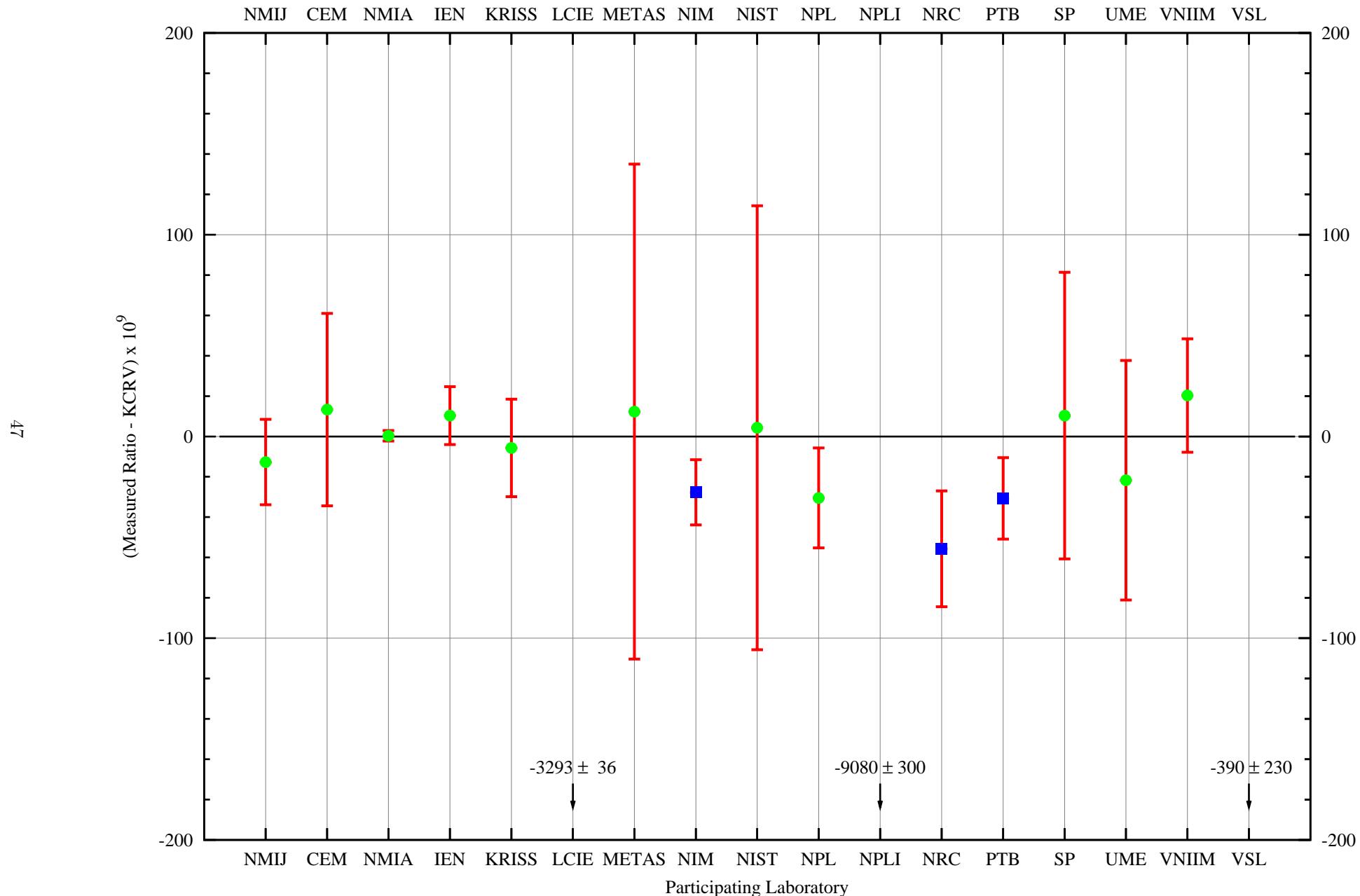
Table 36: Degree of equivalence to the KCRV for the Nominal Ratio 0.4 at 1 kHz, In-Phase Voltage Ratio (nV/V)

NMIJ	CEM	NMIA	IEN	KRISS	LCIE	METAS	NIM
1 ± 12	−32 ± 51	3.9 ±11.6	−1 ± 13	2 ± 20	−58 ± 37	−5 ± 29	16 ± 14

NIST	NPL	NPLI	NRC	PTB	SP	UME	VNIIM	VSL
12 ± 45	3 ± 27	32 ± 13	−21 ± 31	−13 ± 23	10 ± 49	−3 ± 50	−1 ± 21	−2 ± 37

Table 37: Laboratory - Laboratory degree of equivalence for the Nominal Ratio 0.4 at 1 kHz, In-Phase Voltage Ratio (nV/V)

	NMIJ	CEM	NMIA	IEN	KRISS	LCIE	METAS	NIM
NMIJ		33 ± 53	−3 ± 19	2 ± 20	−1 ± 24	59 ± 40	6 ± 32	−15 ± 20
CEM	−33 ± 53		−36 ± 53	−31 ± 54	−34 ± 56	26 ± 64	−27 ± 59	−48 ± 54
NMIA	3 ± 19	36 ± 53		5 ± 19	2 ± 24	62 ± 39	9 ± 32	−12 ± 20
IEN	−2 ± 20	31 ± 54	−5 ± 19		−3 ± 25	57 ± 40	4 ± 33	−17 ± 21
KRISS	1 ± 24	34 ± 56	−2 ± 24	3 ± 25		60 ± 43	7 ± 36	−14 ± 25
LCIE	−59 ± 40	−26 ± 64	−62 ± 39	−57 ± 40	−60 ± 43		−53 ± 47	−74 ± 40
METAS	−6 ± 32	27 ± 59	−9 ± 32	−4 ± 33	−7 ± 36	53 ± 47		−21 ± 33
NIM	15 ± 20	48 ± 54	12 ± 20	17 ± 21	14 ± 25	74 ± 40	21 ± 33	
NIST	11 ± 48	44 ± 69	8 ± 48	13 ± 48	10 ± 50	70 ± 59	17 ± 54	−4 ± 48
NPL	2 ± 31	35 ± 59	−1 ± 31	4 ± 31	1 ± 35	61 ± 46	8 ± 40	−13 ± 32
NPLI	31 ± 19	64 ± 53	28 ± 19	33 ± 20	30 ± 25	90 ± 40	37 ± 32	16 ± 20
NRC	−22 ± 34	11 ± 60	−25 ± 34	−20 ± 34	−23 ± 37	37 ± 49	−16 ± 43	−37 ± 35
PTB	−14 ± 27	19 ± 57	−17 ± 27	−12 ± 28	−15 ± 31	45 ± 44	−8 ± 38	−29 ± 28
SP	9 ± 51	42 ± 72	6 ± 51	11 ± 52	8 ± 54	68 ± 62	15 ± 58	−6 ± 52
UME	−4 ± 52	29 ± 72	−7 ± 52	−2 ± 52	−5 ± 54	55 ± 62	2 ± 58	−19 ± 52
VNIIM	−2 ± 26	31 ± 56	−5 ± 26	0 ± 26	−3 ± 30	57 ± 43	4 ± 37	−17 ± 27
VSL	−3 ± 40	30 ± 64	−6 ± 39	−1 ± 40	−4 ± 43	56 ± 53	3 ± 47	−18 ± 40

	NIST	NPL	NPLI	NRC	PTB	SP	UME	VNIIM	VSL
NMIJ	−11 ± 48	−2 ± 31	−31 ± 19	22 ± 34	14 ± 27	−9 ± 51	4 ± 52	2 ± 26	3 ± 40
CEM	−44 ± 69	−35 ± 59	−64 ± 53	−11 ± 60	−19 ± 57	−42 ± 72	−29 ± 72	−31 ± 56	−30 ± 64
NMIA	−8 ± 48	1 ± 31	−28 ± 19	25 ± 34	17 ± 27	−6 ± 51	7 ± 52	5 ± 26	6 ± 39
IEN	−13 ± 48	−4 ± 31	−33 ± 20	20 ± 34	12 ± 28	−11 ± 52	2 ± 52	0 ± 26	1 ± 40
KRISS	−10 ± 50	−1 ± 35	−30 ± 25	23 ± 37	15 ± 31	−8 ± 54	5 ± 54	3 ± 30	4 ± 43
LCIE	−70 ± 59	−61 ± 46	−90 ± 40	−37 ± 49	−45 ± 44	−68 ± 62	−55 ± 62	−57 ± 43	−56 ± 53
METAS	−17 ± 54	−8 ± 40	−37 ± 32	16 ± 43	8 ± 38	−15 ± 58	−2 ± 58	−4 ± 37	−3 ± 47
NIM	4 ± 48	13 ± 32	−16 ± 20	37 ± 35	29 ± 28	6 ± 52	19 ± 52	17 ± 27	18 ± 40
NIST		9 ± 54	−20 ± 48	33 ± 55	25 ± 52	2 ± 68	15 ± 68	13 ± 51	14 ± 59
NPL	−9 ± 54		−29 ± 31	24 ± 42	16 ± 37	−7 ± 57	6 ± 57	4 ± 35	5 ± 46
NPLI	20 ± 48	29 ± 31		53 ± 34	45 ± 27	22 ± 52	35 ± 52	33 ± 26	34 ± 40
NRC	−33 ± 55	−24 ± 42	−53 ± 34		−8 ± 39	−31 ± 59	−18 ± 59	−20 ± 38	−19 ± 49
PTB	−25 ± 52	−16 ± 37	−45 ± 27	8 ± 39		−23 ± 55	−10 ± 55	−12 ± 32	−11 ± 44
SP	−2 ± 68	7 ± 57	−22 ± 52	31 ± 59	23 ± 55		13 ± 70	11 ± 54	12 ± 62
UME	−15 ± 68	−6 ± 57	−35 ± 52	18 ± 59	10 ± 55	−13 ± 70		−2 ± 55	−1 ± 62
VNIIM	−13 ± 51	−4 ± 35	−33 ± 26	20 ± 38	12 ± 32	−11 ± 54	2 ± 55		1 ± 43
VSL	−14 ± 59	−5 ± 46	−34 ± 40	19 ± 49	11 ± 44	−12 ± 62	1 ± 62	−1 ± 43	

Nominal Ratio: 0.4 at 1 kHz, In-Phase Voltage Ratio (KCRV $\pm$ 2σ) is (-22.9 $\pm$ 5.4) x 10^{-9} of input
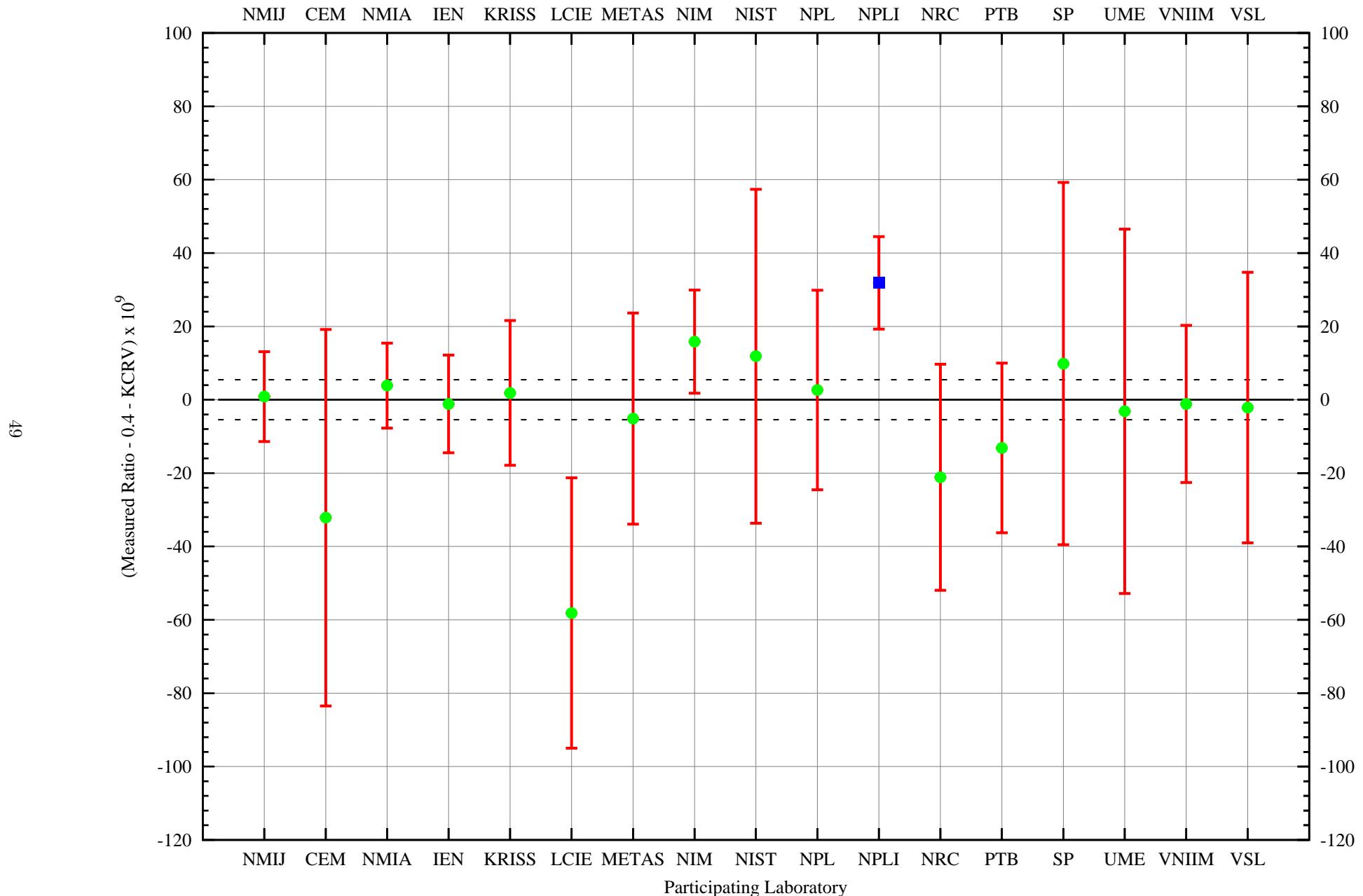
Table 38: Degree of equivalence to the KCRV for the Nominal Ratio 0.4 at 1 kHz, Quadrature Voltage Ratio (nV/V)

NMIJ	CEM	NMIA	IEN	KRISS	LCIE	METAS	NIM
−9 ± 19	18 ± 48	2.0 ± 2.8	4 ± 15	−4 ± 24	2176 ± 35	15 ± 129	−26 ± 12

NIST	NPL	NPLI	NRC	PTB	SP	UME	VNIIM	VSL
12 ± 110	−26 ± 25	−8333 ± 300	−48 ± 29	−25 ± 20	11 ± 71	−12 ± 59	23 ± 28	−343 ± 210

Table 39: Laboratory - Laboratory degree of equivalence for the Nominal Ratio 0.4 at 1 kHz, Quadrature Voltage Ratio (nV/V)

	NMIJ	CEM	NMIA	IEN	KRISS	LCIE	METAS	NIM
NMIJ		−27 ± 52	−11 ± 20	−13 ± 25	−5 ± 31	−2185 ± 40	−24 ± 131	17 ± 24
CEM	27 ± 52		16 ± 48	14 ± 50	22 ± 54	−2158 ± 60	3 ± 138	44 ± 50
NMIA	11 ± 20	−16 ± 48		−2 ± 17	6 ± 25	−2174 ± 36	−13 ± 129	28 ± 14
IEN	13 ± 25	−14 ± 50	2 ± 17		8 ± 29	−2172 ± 39	−11 ± 130	30 ± 21
KRISS	5 ± 31	−22 ± 54	−6 ± 25	−8 ± 29		−2180 ± 43	−19 ± 132	22 ± 28
LCIE	2185 ± 40	2158 ± 60	2174 ± 36	2172 ± 39	2180 ± 43		2161 ± 134	2202 ± 38
METAS	24 ± 131	−3 ± 138	13 ± 129	11 ± 130	19 ± 132	−2161 ± 134		41 ± 130
NIM	−17 ± 24	−44 ± 50	−28 ± 14	−30 ± 21	−22 ± 28	−2202 ± 38	−41 ± 130	
NIST	21 ± 112	−6 ± 120	10 ± 110	8 ± 111	16 ± 113	−2164 ± 116	−3 ± 170	38 ± 111
NPL	−17 ± 32	−44 ± 54	−28 ± 26	−30 ± 30	−22 ± 35	−2202 ± 43	−41 ± 132	0 ± 28
NPLI	−8324 ± 301	−8351 ± 304	−8335 ± 300	−8337 ± 300	−8329 ± 301	−10509 ± 302	−8348 ± 327	−8307 ± 300
NRC	−39 ± 35	−66 ± 56	−50 ± 30	−52 ± 33	−44 ± 38	−2224 ± 46	−63 ± 132	−22 ± 32
PTB	−16 ± 29	−43 ± 52	−27 ± 21	−29 ± 26	−21 ± 32	−2201 ± 41	−40 ± 131	1 ± 24
SP	20 ± 74	−7 ± 86	9 ± 71	7 ± 73	15 ± 75	−2165 ± 79	−4 ± 148	37 ± 72
UME	−3 ± 63	−30 ± 76	−14 ± 60	−16 ± 62	−8 ± 64	−2188 ± 69	−27 ± 142	14 ± 61
VNIIM	32 ± 35	5 ± 56	21 ± 29	19 ± 33	27 ± 38	−2153 ± 45	8 ± 132	49 ± 31
VSL	−334 ± 211	−361 ± 215	−345 ± 210	−347 ± 211	−339 ± 211	−2519 ± 213	−358 ± 247	−317 ± 210

	NIST	NPL	NPLI	NRC	PTB	SP	UME	VNIIM	VSL
NMIJ	−21 ± 112	17 ± 32	8324 ± 301	39 ± 35	16 ± 29	−20 ± 74	3 ± 63	−32 ± 35	334 ± 211
CEM	6 ± 120	44 ± 54	8351 ± 304	66 ± 56	43 ± 52	7 ± 86	30 ± 76	−5 ± 56	361 ± 215
NMIA	−10 ± 110	28 ± 26	8335 ± 300	50 ± 30	27 ± 21	−9 ± 71	14 ± 60	−21 ± 29	345 ± 210
IEN	−8 ± 111	30 ± 30	8337 ± 300	52 ± 33	29 ± 26	−7 ± 73	16 ± 62	−19 ± 33	347 ± 211
KRISS	−16 ± 113	22 ± 35	8329 ± 301	44 ± 38	21 ± 32	−15 ± 75	8 ± 64	−27 ± 38	339 ± 211
LCIE	2164 ± 116	2202 ± 43	10509 ± 302	2224 ± 46	2201 ± 41	2165 ± 79	2188 ± 69	2153 ± 45	2519 ± 213
METAS	3 ± 170	41 ± 132	8348 ± 327	63 ± 132	40 ± 131	4 ± 148	27 ± 142	−8 ± 132	358 ± 247
NIM	−38 ± 111	−0 ± 28	8307 ± 300	22 ± 32	−1 ± 24	−37 ± 72	−14 ± 61	−49 ± 31	317 ± 210
NIST		38 ± 113	8345 ± 320	60 ± 114	37 ± 112	1 ± 131	24 ± 125	−11 ± 114	355 ± 237
NPL	−38 ± 113		8307 ± 301	22 ± 38	−1 ± 33	−37 ± 76	−14 ± 65	−49 ± 38	317 ± 212
NPLI	−8345 ± 320	−8307 ± 301		−8285 ± 301	−8308 ± 301	−8344 ± 308	−8321 ± 306	−8356 ± 301	−7990 ± 366
NRC	−60 ± 114	−22 ± 38	8285 ± 301		−23 ± 36	−59 ± 77	−36 ± 66	−71 ± 41	295 ± 212
PTB	−37 ± 112	1 ± 33	8308 ± 301	23 ± 36		−36 ± 74	−13 ± 63	−48 ± 35	318 ± 211
SP	−1 ± 131	37 ± 76	8344 ± 308	59 ± 77	36 ± 74		23 ± 93	−12 ± 77	354 ± 222
UME	−24 ± 125	14 ± 65	8321 ± 306	36 ± 66	13 ± 63	−23 ± 93		−35 ± 66	331 ± 218
VNIIM	11 ± 114	49 ± 38	8356 ± 301	71 ± 41	48 ± 35	12 ± 77	35 ± 66		366 ± 212
VSL	−355 ± 237	−317 ± 212	7990 ± 366	−295 ± 212	−318 ± 211	−354 ± 222	−331 ± 218	−366 ± 212	

Nominal Ratio: 0.4 at 1 kHz, Quadrature Voltage Ratio (KCRV ± 2σ) is (-97.0 ± 4.4) x 10^{-9} of input
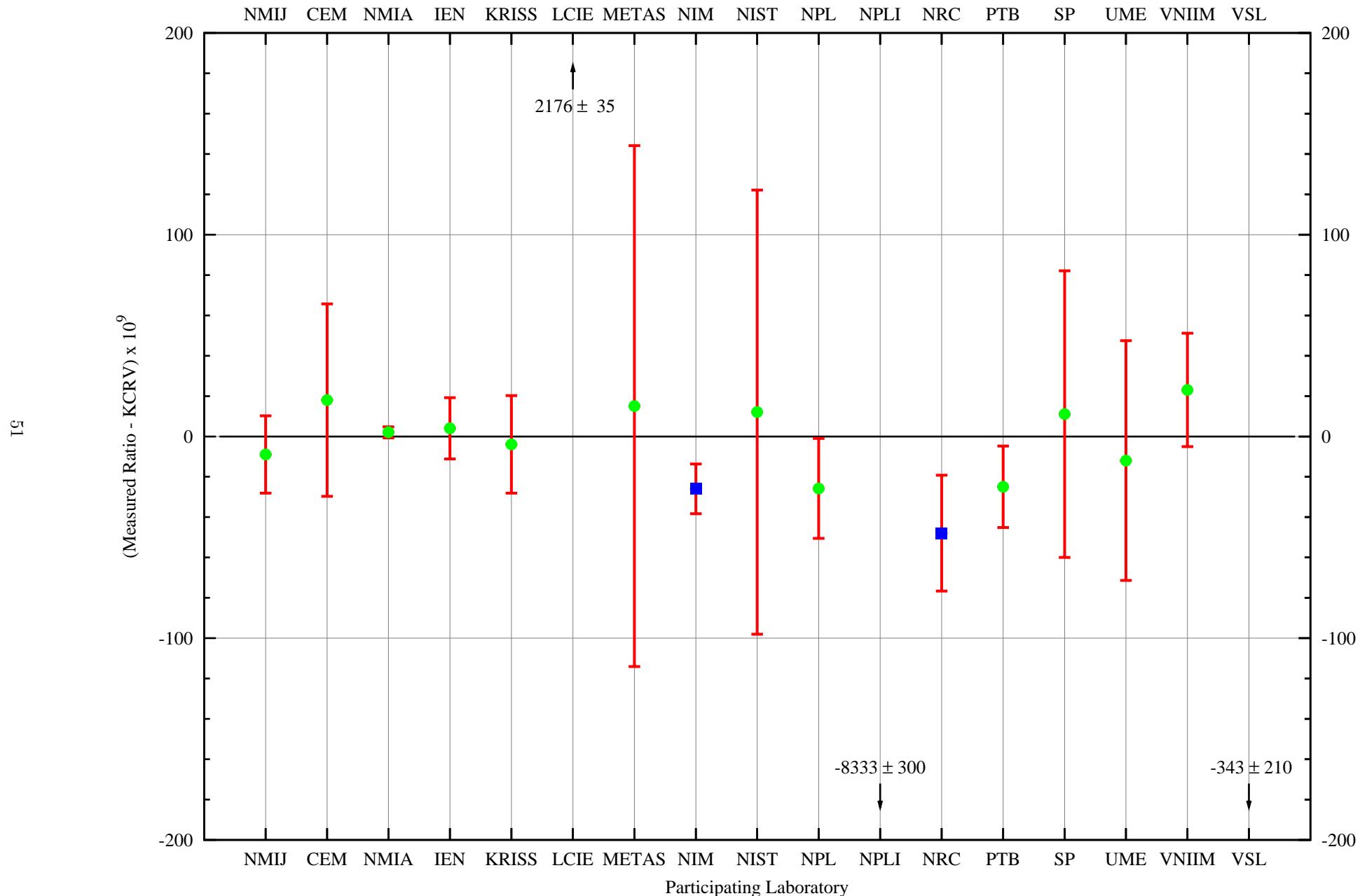
Table 40: Degree of equivalence to the KCRV for the Nominal Ratio 0.3 at 1 kHz, In-Phase Voltage Ratio (nV/V)

NMIJ	CEM	NMIA	IEN	KRISS	LCIE	METAS	NIM
−7 ± 12	−30 ± 51	0.6 ±11.7	−6 ± 14	−2 ± 20	−135 ± 35	−9 ± 27	12 ± 14

NIST	NPL	NPLI	NRC	PTB	SP	UME	VNIIM	VSL
6 ± 46	−1 ± 27	21 ± 13	−21 ± 31	−13 ± 23	2 ± 49	−4 ± 50	−7 ± 21	−2 ± 32

Table 41: Laboratory - Laboratory degree of equivalence for the Nominal Ratio 0.3 at 1 kHz, In-Phase Voltage Ratio (nV/V)

	NMIJ	CEM	NMIA	IEN	KRISS	LCIE	METAS	NIM
NMIJ		23 ± 53	−8 ± 19	−1 ± 20	−5 ± 24	128 ± 38	2 ± 31	−19 ± 20
CEM	−23 ± 53		−31 ± 53	−24 ± 54	−28 ± 56	105 ± 63	−21 ± 59	−42 ± 54
NMIA	8 ± 19	31 ± 53		7 ± 20	3 ± 24	136 ± 38	10 ± 31	−11 ± 20
IEN	1 ± 20	24 ± 54	−7 ± 20		−4 ± 25	129 ± 38	3 ± 32	−18 ± 21
KRISS	5 ± 24	28 ± 56	−3 ± 24	4 ± 25		133 ± 41	7 ± 35	−14 ± 25
LCIE	−128 ± 38	−105 ± 63	−136 ± 38	−129 ± 38	−133 ± 41		−126 ± 45	−147 ± 38
METAS	−2 ± 31	21 ± 59	−10 ± 31	−3 ± 32	−7 ± 35	126 ± 45		−21 ± 32
NIM	19 ± 20	42 ± 54	11 ± 20	18 ± 21	14 ± 25	147 ± 38	21 ± 32	
NIST	13 ± 48	36 ± 69	5 ± 48	12 ± 48	8 ± 50	141 ± 58	15 ± 54	−6 ± 48
NPL	7 ± 31	30 ± 59	−1 ± 31	6 ± 31	2 ± 35	135 ± 45	9 ± 39	−12 ± 32
NPLI	28 ± 19	51 ± 53	20 ± 19	27 ± 20	23 ± 25	156 ± 38	30 ± 31	9 ± 20
NRC	−14 ± 34	9 ± 60	−22 ± 34	−15 ± 35	−19 ± 37	114 ± 47	−12 ± 42	−33 ± 35
PTB	−6 ± 27	17 ± 57	−14 ± 27	−7 ± 28	−11 ± 31	122 ± 43	−4 ± 37	−25 ± 28
SP	9 ± 51	32 ± 72	1 ± 51	8 ± 52	4 ± 54	137 ± 61	11 ± 57	−10 ± 52
UME	3 ± 52	26 ± 72	−5 ± 52	2 ± 52	−2 ± 54	131 ± 61	5 ± 57	−16 ± 52
VNIIM	0 ± 26	23 ± 56	−8 ± 26	−1 ± 27	−5 ± 30	128 ± 42	2 ± 36	−19 ± 27
VSL	5 ± 35	28 ± 61	−3 ± 35	4 ± 36	0 ± 39	133 ± 48	7 ± 43	−14 ± 36

	NIST	NPL	NPLI	NRC	PTB	SP	UME	VNIIM	VSL
NMIJ	−13 ± 48	−7 ± 31	−28 ± 19	14 ± 34	6 ± 27	−9 ± 51	−3 ± 52	0 ± 26	−5 ± 35
CEM	−36 ± 69	−30 ± 59	−51 ± 53	−9 ± 60	−17 ± 57	−32 ± 72	−26 ± 72	−23 ± 56	−28 ± 61
NMIA	−5 ± 48	1 ± 31	−20 ± 19	22 ± 34	14 ± 27	−1 ± 51	5 ± 52	8 ± 26	3 ± 35
IEN	−12 ± 48	−6 ± 31	−27 ± 20	15 ± 35	7 ± 28	−8 ± 52	−2 ± 52	1 ± 27	−4 ± 36
KRISS	−8 ± 50	−2 ± 35	−23 ± 25	19 ± 37	11 ± 31	−4 ± 54	2 ± 54	5 ± 30	0 ± 39
LCIE	−141 ± 58	−135 ± 45	−156 ± 38	−114 ± 47	−122 ± 43	−137 ± 61	−131 ± 61	−128 ± 42	−133 ± 48
METAS	−15 ± 54	−9 ± 39	−30 ± 31	12 ± 42	4 ± 37	−11 ± 57	−5 ± 57	−2 ± 36	−7 ± 43
NIM	6 ± 48	12 ± 32	−9 ± 20	33 ± 35	25 ± 28	10 ± 52	16 ± 52	19 ± 27	14 ± 36
NIST		6 ± 54	−15 ± 48	27 ± 55	19 ± 52	4 ± 68	10 ± 68	13 ± 51	8 ± 56
NPL	−6 ± 54		−21 ± 31	21 ± 42	13 ± 37	−2 ± 57	4 ± 57	7 ± 35	2 ± 43
NPLI	15 ± 48	21 ± 31		42 ± 34	34 ± 27	19 ± 52	25 ± 52	28 ± 26	23 ± 35
NRC	−27 ± 55	−21 ± 42	−42 ± 34		−8 ± 39	−23 ± 59	−17 ± 59	−14 ± 38	−19 ± 45
PTB	−19 ± 52	−13 ± 37	−34 ± 27	8 ± 39		−15 ± 55	−9 ± 55	−6 ± 32	−11 ± 40
SP	−4 ± 68	2 ± 57	−19 ± 52	23 ± 59	15 ± 55		6 ± 70	9 ± 54	4 ± 59
UME	−10 ± 68	−4 ± 57	−25 ± 52	17 ± 59	9 ± 55	−6 ± 70		3 ± 55	−2 ± 60
VNIIM	−13 ± 51	−7 ± 35	−28 ± 26	14 ± 38	6 ± 32	−9 ± 54	−3 ± 55		−5 ± 39
VSL	−8 ± 56	−2 ± 43	−23 ± 35	19 ± 45	11 ± 40	−4 ± 59	2 ± 60	5 ± 39	

Nominal Ratio: 0.3 at 1 kHz, In-Phase Voltage Ratio (KCRV ± 2σ) is (-38.6 ± 5.1) x 10⁻⁹ of input

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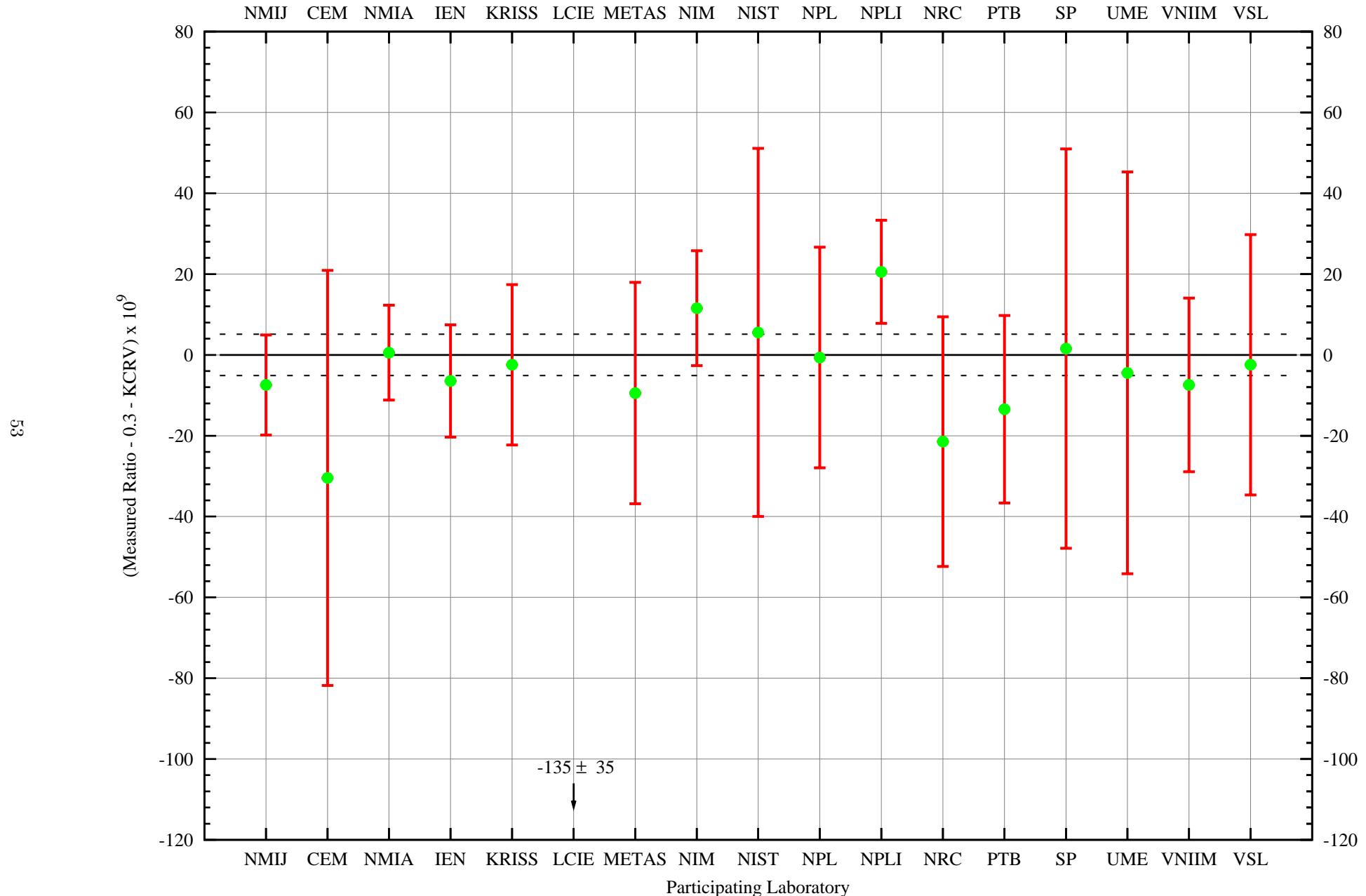
Table 42: Degree of equivalence to the KCRV for the Nominal Ratio 0.3 at 1 kHz, Quadrature Voltage Ratio (nV/V)

NMIJ	CEM	NMIA	IEN	KRISS	LCIE	METAS	NIM
−7 ± 16	20 ± 48	0.0 ± 2.9	15 ± 12	−6 ± 24	7460 ± 33	14 ± 128	−29 ± 9

NIST	NPL	NPLI	NRC	PTB	SP	UME	VNIIM	VSL
12 ± 110	−22 ± 25	−6989 ± 300	−40 ± 29	−22 ± 20	17 ± 71	−11 ± 59	18 ± 28	−259 ± 180

Table 43: Laboratory - Laboratory degree of equivalence for the Nominal Ratio 0.3 at 1 kHz, Quadrature Voltage Ratio (nV/V)

	NMIJ	CEM	NMIA	IEN	KRISS	LCIE	METAS	NIM
NMIJ		−27 ± 51	−7 ± 18	−22 ± 21	−1 ± 30	−7467 ± 37	−21 ± 129	22 ± 19
CEM	27 ± 51		20 ± 48	5 ± 50	26 ± 54	−7440 ± 58	6 ± 136	49 ± 49
NMIA	7 ± 18	−20 ± 48		−15 ± 14	6 ± 25	−7460 ± 34	−14 ± 128	29 ± 11
IEN	22 ± 21	−5 ± 50	15 ± 14		21 ± 28	−7445 ± 36	1 ± 128	44 ± 16
KRISS	1 ± 30	−26 ± 54	−6 ± 25	−21 ± 28		−7466 ± 41	−20 ± 130	23 ± 26
LCIE	7467 ± 37	7440 ± 58	7460 ± 34	7445 ± 36	7466 ± 41		7446 ± 132	7489 ± 35
METAS	21 ± 129	−6 ± 136	14 ± 128	−1 ± 128	20 ± 130	−7446 ± 132		43 ± 128
NIM	−22 ± 19	−49 ± 49	−29 ± 11	−44 ± 16	−23 ± 26	−7489 ± 35	−43 ± 128	
NIST	19 ± 111	−8 ± 120	12 ± 110	−3 ± 111	18 ± 113	−7448 ± 115	−2 ± 169	41 ± 111
NPL	−15 ± 30	−42 ± 54	−22 ± 26	−37 ± 28	−16 ± 35	−7482 ± 42	−36 ± 130	7 ± 27
NPLI	−6982 ± 301	−7009 ± 304	−6989 ± 300	−7004 ± 300	−6983 ± 301	−14449 ± 302	−7003 ± 326	−6960 ± 300
NRC	−33 ± 34	−60 ± 56	−40 ± 30	−55 ± 32	−34 ± 38	−7500 ± 44	−54 ± 131	−11 ± 31
PTB	−15 ± 27	−42 ± 52	−22 ± 21	−37 ± 24	−16 ± 32	−7482 ± 39	−36 ± 129	7 ± 23
SP	24 ± 73	−3 ± 86	17 ± 71	2 ± 72	23 ± 75	−7443 ± 79	3 ± 146	46 ± 72
UME	−4 ± 62	−31 ± 76	−11 ± 60	−26 ± 61	−5 ± 64	−7471 ± 68	−25 ± 141	18 ± 60
VNIIM	25 ± 33	−2 ± 56	18 ± 29	3 ± 31	24 ± 38	−7442 ± 44	4 ± 131	47 ± 30
VSL	−252 ± 181	−279 ± 186	−259 ± 180	−274 ± 181	−253 ± 182	−7719 ± 183	−273 ± 221	−230 ± 180

	NIST	NPL	NPLI	NRC	PTB	SP	UME	VNIIM	VSL
NMIJ	−19 ± 111	15 ± 30	6982 ± 301	33 ± 34	15 ± 27	−24 ± 73	4 ± 62	−25 ± 33	252 ± 181
CEM	8 ± 120	42 ± 54	7009 ± 304	60 ± 56	42 ± 52	3 ± 86	31 ± 76	2 ± 56	279 ± 186
NMIA	−12 ± 110	22 ± 26	6989 ± 300	40 ± 30	22 ± 21	−17 ± 71	11 ± 60	−18 ± 29	259 ± 180
IEN	3 ± 111	37 ± 28	7004 ± 300	55 ± 32	37 ± 24	−2 ± 72	26 ± 61	−3 ± 31	274 ± 181
KRISS	−18 ± 113	16 ± 35	6983 ± 301	34 ± 38	16 ± 32	−23 ± 75	5 ± 64	−24 ± 38	253 ± 182
LCIE	7448 ± 115	7482 ± 42	14449 ± 302	7500 ± 44	7482 ± 39	7443 ± 79	7471 ± 68	7442 ± 44	7719 ± 183
METAS	2 ± 169	36 ± 130	7003 ± 326	54 ± 131	36 ± 129	−3 ± 146	25 ± 141	−4 ± 131	273 ± 221
NIM	−41 ± 111	−7 ± 27	6960 ± 300	11 ± 31	−7 ± 23	−46 ± 72	−18 ± 60	−47 ± 30	230 ± 180
NIST		34 ± 113	7001 ± 320	52 ± 114	34 ± 112	−5 ± 131	23 ± 125	−6 ± 114	271 ± 211
NPL	−34 ± 113		6967 ± 301	18 ± 38	−0 ± 33	−39 ± 76	−11 ± 65	−40 ± 38	237 ± 182
NPLI	−7001 ± 320	−6967 ± 301		−6949 ± 301	−6967 ± 301	−7006 ± 308	−6978 ± 306	−7007 ± 301	−6730 ± 350
NRC	−52 ± 114	−18 ± 38	6949 ± 301		−18 ± 36	−57 ± 77	−29 ± 66	−58 ± 41	219 ± 182
PTB	−34 ± 112	0 ± 33	6967 ± 301	18 ± 36		−39 ± 74	−11 ± 63	−40 ± 35	237 ± 181
SP	5 ± 131	39 ± 76	7006 ± 308	57 ± 77	39 ± 74		28 ± 93	−1 ± 77	276 ± 194
UME	−23 ± 125	11 ± 65	6978 ± 306	29 ± 66	11 ± 63	−28 ± 93		−29 ± 66	248 ± 190
VNIIM	6 ± 114	40 ± 38	7007 ± 301	58 ± 41	40 ± 35	1 ± 77	29 ± 66		277 ± 182
VSL	−271 ± 211	−237 ± 182	6730 ± 350	−219 ± 182	−237 ± 181	−276 ± 194	−248 ± 190	−277 ± 182	

Nominal Ratio: 0.3 at 1 kHz, Quadrature Voltage Ratio (KCRV $\pm$ 2σ) is (-51.0 $\pm$ 4.3) x 10^{-9} of input

(Measured Ratio - KCRV) x 10^9

Participating Laboratory

NMIJ CEM NMIA IEN KRISS LCIE METAS NIM NIST NPL NPLI NRC PTB SP UME VNIIM VSL

7460 $\pm$ 33

-6989 $\pm$ 300

-259 $\pm$ 180
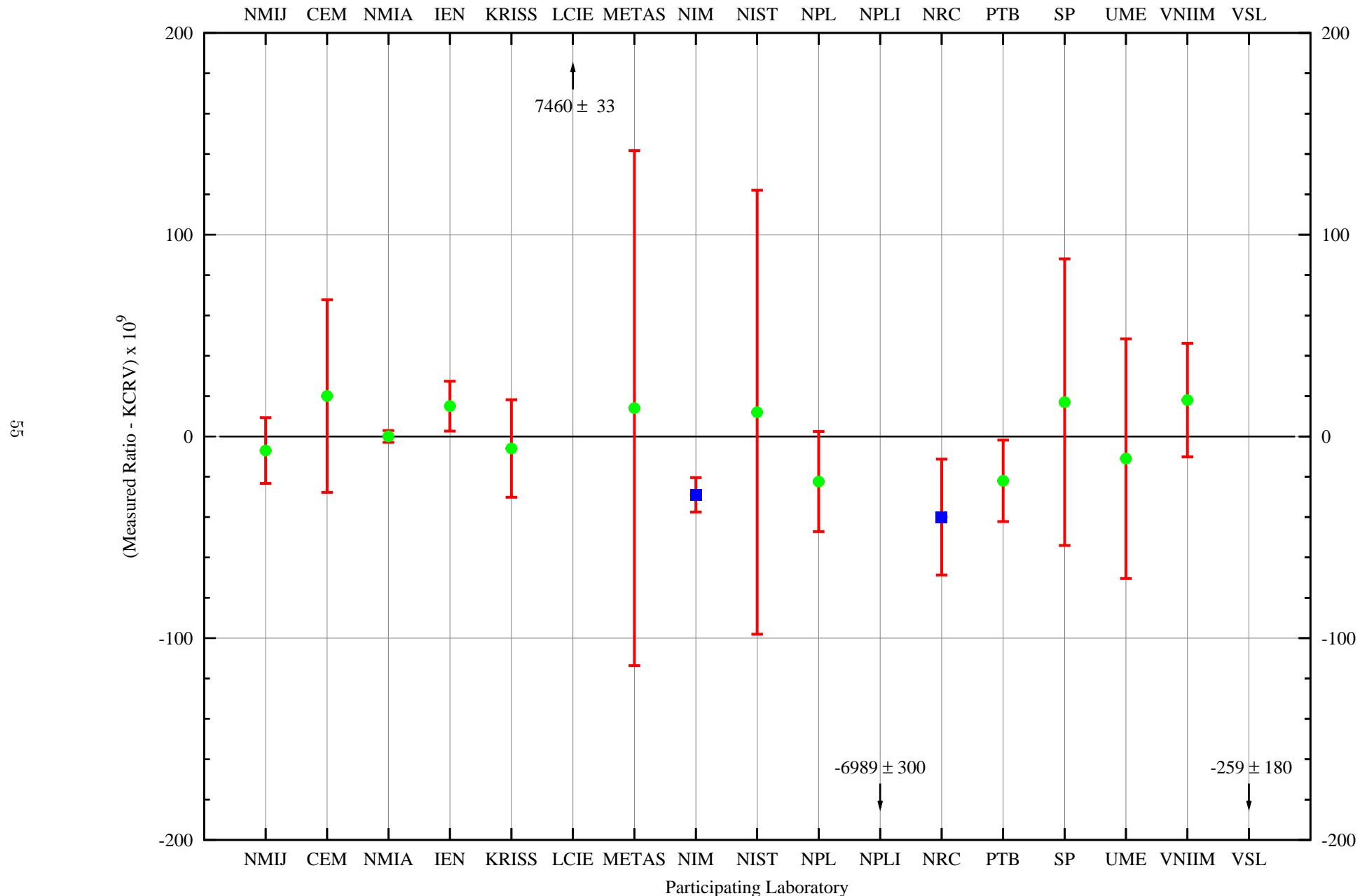
Table 44: Degree of equivalence to the KCRV for the Nominal Ratio 0.2 at 1 kHz, In-Phase Voltage Ratio (nV/V)

NMIJ	CEM	NMIA	IEN	KRISS	LCIE	METAS	NIM
−7 ± 12	−20 ± 51	0.9 ±11.7	−3 ± 14	−1 ± 20	−91 ± 31	−6 ± 24	3 ± 17

NIST	NPL	NPLI	NRC	PTB	SP	UME	VNIIM	VSL
5 ± 45	1 ± 27	18 ± 13	−15 ± 31	−8 ± 23	1 ± 49	2 ± 50	−5 ± 21	2 ± 27

Table 45: Laboratory - Laboratory degree of equivalence for the Nominal Ratio 0.2 at 1 kHz, In-Phase Voltage Ratio (nV/V)

	NMIJ	CEM	NMIA	IEN	KRISS	LCIE	METAS	NIM
NMIJ		13 ± 53	−8 ± 18	−4 ± 20	−6 ± 24	84 ± 34	−1 ± 28	−10 ± 22
CEM	−13 ± 53		−21 ± 53	−17 ± 54	−19 ± 56	71 ± 61	−14 ± 57	−23 ± 55
NMIA	8 ± 18	21 ± 53		4 ± 19	2 ± 24	92 ± 34	7 ± 28	−2 ± 22
IEN	4 ± 20	17 ± 54	−4 ± 19		−2 ± 25	88 ± 35	3 ± 29	−6 ± 23
KRISS	6 ± 24	19 ± 56	−2 ± 24	2 ± 25		90 ± 38	5 ± 32	−4 ± 27
LCIE	−84 ± 34	−71 ± 61	−92 ± 34	−88 ± 35	−90 ± 38		−85 ± 40	−94 ± 36
METAS	1 ± 28	14 ± 57	−7 ± 28	−3 ± 29	−5 ± 32	85 ± 40		−9 ± 30
NIM	10 ± 22	23 ± 55	2 ± 22	6 ± 23	4 ± 27	94 ± 36	9 ± 30	
NIST	12 ± 47	25 ± 68	4 ± 47	8 ± 47	6 ± 49	96 ± 55	11 ± 51	2 ± 48
NPL	8 ± 31	21 ± 59	0 ± 31	4 ± 31	2 ± 35	92 ± 42	7 ± 37	−2 ± 33
NPLI	25 ± 19	38 ± 53	17 ± 19	21 ± 20	19 ± 25	109 ± 35	24 ± 28	15 ± 22
NRC	−8 ± 34	5 ± 60	−16 ± 34	−12 ± 35	−14 ± 37	76 ± 45	−9 ± 40	−18 ± 36
PTB	−1 ± 27	12 ± 57	−9 ± 27	−5 ± 28	−7 ± 31	83 ± 40	−2 ± 34	−11 ± 30
SP	8 ± 51	21 ± 72	0 ± 51	4 ± 52	2 ± 54	92 ± 59	7 ± 55	−2 ± 53
UME	9 ± 52	22 ± 72	1 ± 52	5 ± 52	3 ± 54	93 ± 59	8 ± 56	−1 ± 53
VNIIM	2 ± 26	15 ± 56	−6 ± 26	−2 ± 26	−4 ± 30	86 ± 39	1 ± 33	−8 ± 28
VSL	9 ± 30	22 ± 58	1 ± 30	5 ± 31	3 ± 34	93 ± 42	8 ± 37	−1 ± 32

	NIST	NPL	NPLI	NRC	PTB	SP	UME	VNIIM	VSL
NMIJ	−12 ± 47	−8 ± 31	−25 ± 19	8 ± 34	1 ± 27	−8 ± 51	−9 ± 52	−2 ± 26	−9 ± 30
CEM	−25 ± 68	−21 ± 59	−38 ± 53	−5 ± 60	−12 ± 57	−21 ± 72	−22 ± 72	−15 ± 56	−22 ± 58
NMIA	−4 ± 47	−0 ± 31	−17 ± 19	16 ± 34	9 ± 27	0 ± 51	−1 ± 52	6 ± 26	−1 ± 30
IEN	−8 ± 47	−4 ± 31	−21 ± 20	12 ± 35	5 ± 28	−4 ± 52	−5 ± 52	2 ± 26	−5 ± 31
KRISS	−6 ± 49	−2 ± 35	−19 ± 25	14 ± 37	7 ± 31	−2 ± 54	−3 ± 54	4 ± 30	−3 ± 34
LCIE	−96 ± 55	−92 ± 42	−109 ± 35	−76 ± 45	−83 ± 40	−92 ± 59	−93 ± 59	−86 ± 39	−93 ± 42
METAS	−11 ± 51	−7 ± 37	−24 ± 28	9 ± 40	2 ± 34	−7 ± 55	−8 ± 56	−1 ± 33	−8 ± 37
NIM	−2 ± 48	2 ± 33	−15 ± 22	18 ± 36	11 ± 30	2 ± 53	1 ± 53	8 ± 28	1 ± 32
NIST		4 ± 53	−13 ± 47	20 ± 55	13 ± 51	4 ± 67	3 ± 67	10 ± 50	3 ± 52
NPL	−4 ± 53		−17 ± 31	16 ± 42	9 ± 37	0 ± 57	−1 ± 57	6 ± 35	−1 ± 39
NPLI	13 ± 47	17 ± 31		33 ± 34	26 ± 27	17 ± 52	16 ± 52	23 ± 26	16 ± 30
NRC	−20 ± 55	−16 ± 42	−33 ± 34		−7 ± 39	−16 ± 59	−17 ± 59	−10 ± 38	−17 ± 41
PTB	−13 ± 51	−9 ± 37	−26 ± 27	7 ± 39		−9 ± 55	−10 ± 55	−3 ± 32	−10 ± 36
SP	−4 ± 67	−0 ± 57	−17 ± 52	16 ± 59	9 ± 55		−1 ± 70	6 ± 54	−1 ± 57
UME	−3 ± 67	1 ± 57	−16 ± 52	17 ± 59	10 ± 55	1 ± 70		7 ± 55	0 ± 57
VNIIM	−10 ± 50	−6 ± 35	−23 ± 26	10 ± 38	3 ± 32	−6 ± 54	−7 ± 55		−7 ± 35
VSL	−3 ± 52	1 ± 39	−16 ± 30	17 ± 41	10 ± 36	1 ± 57	0 ± 57	7 ± 35	

Nominal Ratio: 0.2 at 1 kHz, In-Phase Voltage Ratio (KCRV ± 2σ) is (-45.9 ± 5.1) x 10^{-9} of input

(Measured Ratio - 0.2 - KCRV) x 10^9

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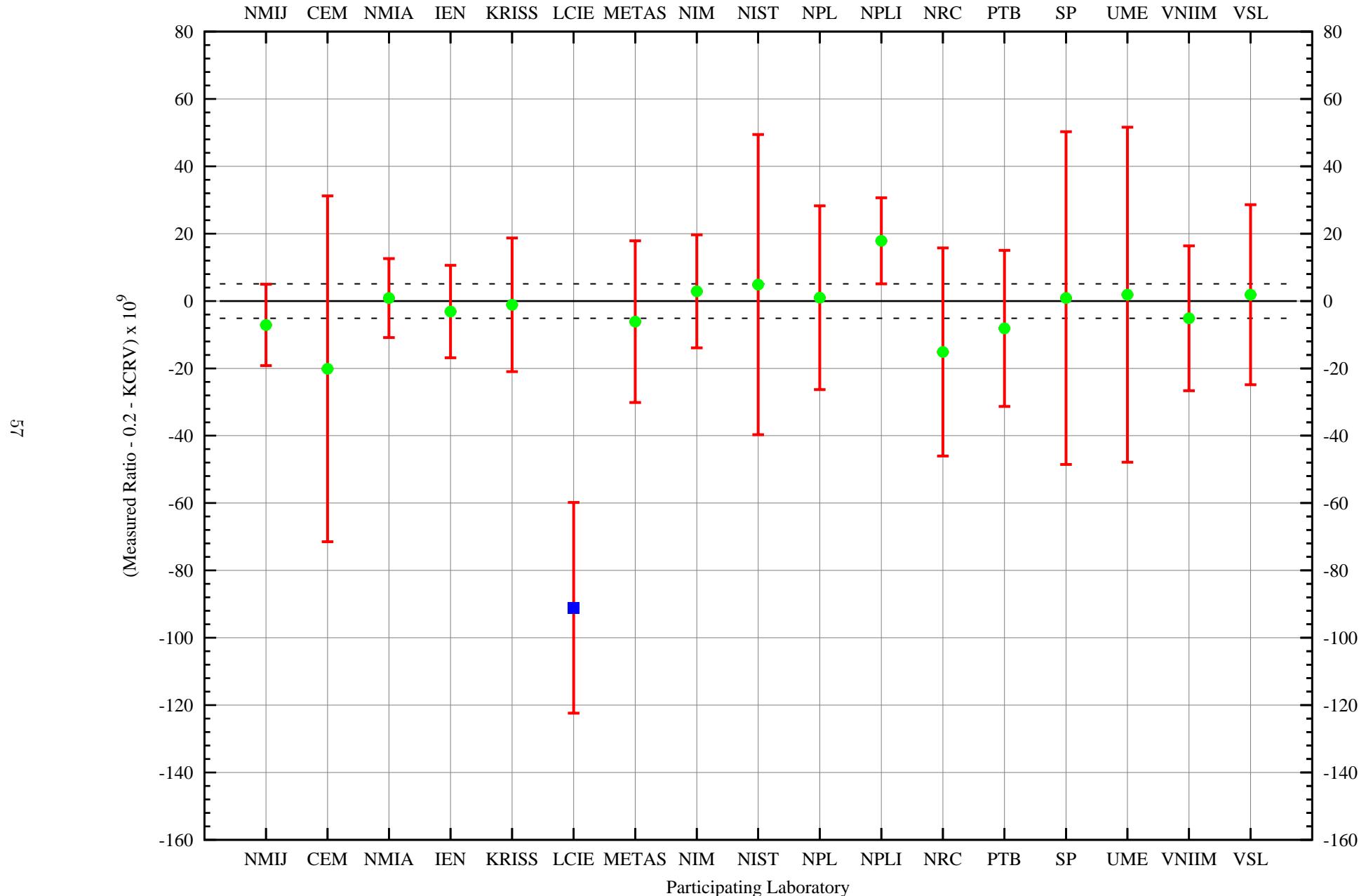
Table 46: Degree of equivalence to the KCRV for the Nominal Ratio 0.2 at 1 kHz, Quadrature Voltage Ratio (nV/V)

NMIJ	CEM	NMIA	IEN	KRISS	LCIE	METAS	NIM
−4 ± 13	19 ± 48	0.4 ± 3.2	10 ± 11	−6 ± 24	9880 ± 29	12 ± 108	−20 ± 9

NIST	NPL	NPLI	NRC	PTB	SP	UME	VNIIM	VSL
12 ± 100	−15 ± 25	−5315 ± 300	−27 ± 29	−14 ± 20	6 ± 71	−1 ± 59	21 ± 28	−165 ± 150

Table 47: Laboratory - Laboratory degree of equivalence for the Nominal Ratio 0.2 at 1 kHz, Quadrature Voltage Ratio (nV/V)

	NMIJ	CEM	NMIA	IEN	KRISS	LCIE	METAS	NIM
NMIJ		−23 ± 50	−4 ± 14	−14 ± 18	2 ± 28	−9884 ± 32	−16 ± 109	16 ± 16
CEM	23 ± 50		19 ± 48	9 ± 49	25 ± 54	−9861 ± 56	7 ± 118	39 ± 49
NMIA	4 ± 14	−19 ± 48		−10 ± 13	6 ± 25	−9880 ± 30	−12 ± 108	20 ± 11
IEN	14 ± 18	−9 ± 49	10 ± 13		16 ± 27	−9870 ± 32	−2 ± 108	30 ± 15
KRISS	−2 ± 28	−25 ± 54	−6 ± 25	−16 ± 27		−9886 ± 38	−18 ± 111	14 ± 26
LCIE	9884 ± 32	9861 ± 56	9880 ± 30	9870 ± 32	9886 ± 38		9868 ± 112	9900 ± 31
METAS	16 ± 109	−7 ± 118	12 ± 108	2 ± 108	18 ± 111	−9868 ± 112		32 ± 108
NIM	−16 ± 16	−39 ± 49	−20 ± 11	−30 ± 15	−14 ± 26	−9900 ± 31	−32 ± 108	
NIST	16 ± 101	−7 ± 111	12 ± 100	2 ± 101	18 ± 103	−9868 ± 104	0 ± 147	32 ± 101
NPL	−12 ± 29	−35 ± 54	−16 ± 26	−26 ± 28	−10 ± 35	−9896 ± 39	−28 ± 111	4 ± 27
NPLI	−5311 ± 300	−5334 ± 304	−5315 ± 300	−5325 ± 300	−5309 ± 301	−15195 ± 301	−5327 ± 319	−5295 ± 300
NRC	−23 ± 32	−46 ± 56	−27 ± 30	−37 ± 31	−21 ± 38	−9907 ± 41	−39 ± 112	−7 ± 31
PTB	−10 ± 25	−33 ± 52	−14 ± 21	−24 ± 24	−8 ± 32	−9894 ± 36	−26 ± 110	6 ± 23
SP	10 ± 72	−13 ± 86	6 ± 71	−4 ± 72	12 ± 75	−9874 ± 77	−6 ± 129	26 ± 72
UME	3 ± 61	−20 ± 76	−1 ± 60	−11 ± 61	5 ± 64	−9881 ± 66	−13 ± 123	19 ± 60
VNIIM	25 ± 31	2 ± 56	21 ± 29	11 ± 31	27 ± 38	−9859 ± 41	9 ± 111	41 ± 30
VSL	−161 ± 151	−184 ± 158	−165 ± 150	−175 ± 151	−159 ± 152	−10045 ± 153	−177 ± 185	−145 ± 150

	NIST	NPL	NPLI	NRC	PTB	SP	UME	VNIIM	VSL
NMIJ	−16 ± 101	12 ± 29	5311 ± 300	23 ± 32	10 ± 25	−10 ± 72	−3 ± 61	−25 ± 31	161 ± 151
CEM	7 ± 111	35 ± 54	5334 ± 304	46 ± 56	33 ± 52	13 ± 86	20 ± 76	−2 ± 56	184 ± 158
NMIA	−12 ± 100	16 ± 26	5315 ± 300	27 ± 30	14 ± 21	−6 ± 71	1 ± 60	−21 ± 29	165 ± 150
IEN	−2 ± 101	26 ± 28	5325 ± 300	37 ± 31	24 ± 24	4 ± 72	11 ± 61	−11 ± 31	175 ± 151
KRISS	−18 ± 103	10 ± 35	5309 ± 301	21 ± 38	8 ± 32	−12 ± 75	−5 ± 64	−27 ± 38	159 ± 152
LCIE	9868 ± 104	9896 ± 39	15195 ± 301	9907 ± 41	9894 ± 36	9874 ± 77	9881 ± 66	9859 ± 41	10045 ± 153
METAS	0 ± 147	28 ± 111	5327 ± 319	39 ± 112	26 ± 110	6 ± 129	13 ± 123	−9 ± 111	177 ± 185
NIM	−32 ± 101	−4 ± 27	5295 ± 300	7 ± 31	−6 ± 23	−26 ± 72	−19 ± 60	−41 ± 30	145 ± 150
NIST		28 ± 103	5327 ± 316	39 ± 104	26 ± 102	6 ± 123	13 ± 117	−9 ± 104	177 ± 180
NPL	−28 ± 103		5299 ± 301	11 ± 38	−2 ± 33	−22 ± 76	−15 ± 65	−37 ± 38	149 ± 152
NPLI	−5327 ± 316	−5299 ± 301		−5288 ± 301	−5301 ± 301	−5321 ± 308	−5314 ± 306	−5336 ± 301	−5150 ± 335
NRC	−39 ± 104	−11 ± 38	5288 ± 301		−13 ± 36	−33 ± 77	−26 ± 66	−48 ± 41	138 ± 153
PTB	−26 ± 102	2 ± 33	5301 ± 301	13 ± 36		−20 ± 74	−13 ± 63	−35 ± 35	151 ± 152
SP	−6 ± 123	22 ± 76	5321 ± 308	33 ± 77	20 ± 74		7 ± 93	−15 ± 77	171 ± 166
UME	−13 ± 117	15 ± 65	5314 ± 306	26 ± 66	13 ± 63	−7 ± 93		−22 ± 66	164 ± 161
VNIIM	9 ± 104	37 ± 38	5336 ± 301	48 ± 41	35 ± 35	15 ± 77	22 ± 66		186 ± 153
VSL	−177 ± 180	−149 ± 152	5150 ± 335	−138 ± 153	−151 ± 152	−171 ± 166	−164 ± 161	−186 ± 153	

Nominal Ratio: 0.2 at 1 kHz, Quadrature Voltage Ratio (KCRV $\pm 2\sigma$) is (-15.4 $\pm$ 4.1) x 10^{-9} of input
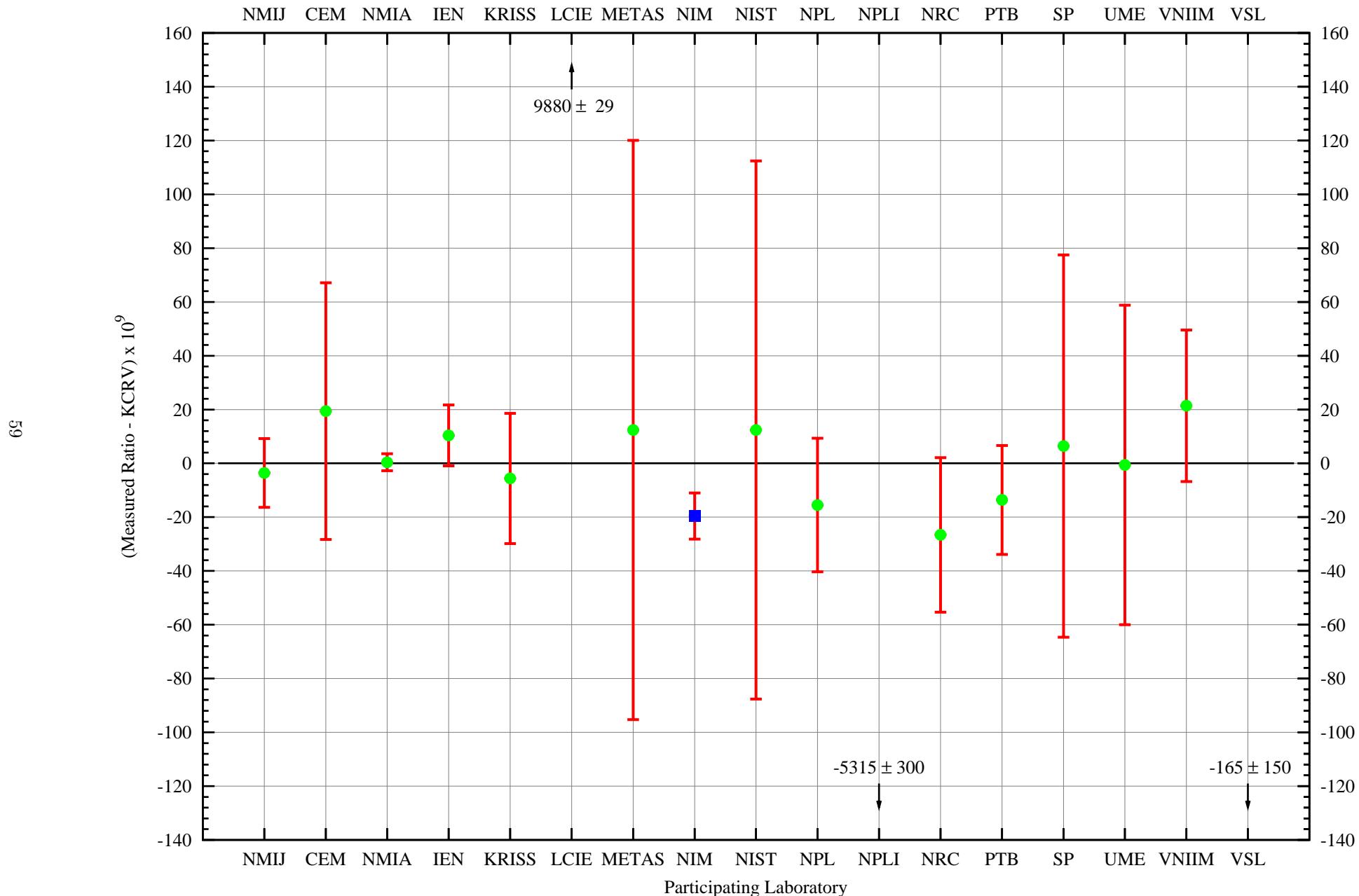
Table 48: Degree of equivalence to the KCRV for the Nominal Ratio 0.1 at 1 kHz, In-Phase Voltage Ratio (nV/V)

NMIJ	CEM	NMIA	IEN	KRISS	LCIE	METAS	NIM
-7 ± 12	-12 ± 51	-0.4 ± 11.9	7 ± 14	-2 ± 20	11 ± 29	-5 ± 19	1 ± 13

NIST	NPL	NPLI	NRC	PTB	SP	UME	VNIIM	VSL
3 ± 44	-0 ± 27	10 ± 13	-9 ± 31	-6 ± 23	-3 ± 49	1 ± 50	-4 ± 22	2 ± 21

Table 49: Laboratory - Laboratory degree of equivalence for the Nominal Ratio 0.1 at 1 kHz, In-Phase Voltage Ratio (nV/V)

	NMIJ	CEM	NMIA	IEN	KRISS	LCIE	METAS	NIM
NMIJ		5 ± 53	-7 ± 18	-14 ± 19	-5 ± 24	-18 ± 32	-2 ± 24	-8 ± 19
CEM	-5 ± 53		-12 ± 53	-19 ± 54	-10 ± 56	-23 ± 59	-7 ± 55	-13 ± 53
NMIA	7 ± 18	12 ± 53		-7 ± 19	2 ± 24	-11 ± 32	5 ± 24	-1 ± 19
IEN	14 ± 19	19 ± 54	7 ± 19		9 ± 25	-4 ± 32	12 ± 25	6 ± 20
KRISS	5 ± 24	10 ± 56	-2 ± 24	-9 ± 25		-13 ± 35	3 ± 29	-3 ± 24
LCIE	18 ± 32	23 ± 59	11 ± 32	4 ± 32	13 ± 35		16 ± 35	10 ± 32
METAS	2 ± 24	7 ± 55	-5 ± 24	-12 ± 25	-3 ± 29	-16 ± 35		-6 ± 24
NIM	8 ± 19	13 ± 53	1 ± 19	-6 ± 20	3 ± 24	-10 ± 32	6 ± 24	
NIST	10 ± 46	15 ± 68	3 ± 46	-4 ± 46	5 ± 48	-8 ± 53	8 ± 48	2 ± 46
NPL	7 ± 31	12 ± 59	0 ± 31	-7 ± 31	2 ± 35	-11 ± 40	5 ± 34	-1 ± 31
NPLI	17 ± 19	22 ± 53	10 ± 19	3 ± 20	12 ± 25	-1 ± 32	15 ± 24	9 ± 19
NRC	-2 ± 34	3 ± 60	-9 ± 34	-16 ± 34	-7 ± 37	-20 ± 43	-4 ± 37	-10 ± 34
PTB	1 ± 27	6 ± 57	-6 ± 27	-13 ± 28	-4 ± 31	-17 ± 37	-1 ± 31	-7 ± 27
SP	4 ± 51	9 ± 72	-3 ± 51	-10 ± 52	-1 ± 54	-14 ± 58	2 ± 54	-4 ± 51
UME	8 ± 52	13 ± 72	1 ± 52	-6 ± 52	3 ± 54	-10 ± 58	6 ± 54	0 ± 52
VNIIM	3 ± 26	8 ± 56	-4 ± 26	-11 ± 26	-2 ± 30	-15 ± 36	1 ± 30	-5 ± 26
VSL	9 ± 25	14 ± 56	2 ± 25	-5 ± 26	4 ± 30	-9 ± 36	7 ± 29	1 ± 25

	NIST	NPL	NPLI	NRC	PTB	SP	UME	VNIIM	VSL
NMIJ	-10 ± 46	-7 ± 31	-17 ± 19	2 ± 34	-1 ± 27	-4 ± 51	-8 ± 52	-3 ± 26	-9 ± 25
CEM	-15 ± 68	-12 ± 59	-22 ± 53	-3 ± 60	-6 ± 57	-9 ± 72	-13 ± 72	-8 ± 56	-14 ± 56
NMIA	-3 ± 46	0 ± 31	-10 ± 19	9 ± 34	6 ± 27	3 ± 51	-1 ± 52	4 ± 26	-2 ± 25
IEN	4 ± 46	7 ± 31	-3 ± 20	16 ± 34	13 ± 28	10 ± 52	6 ± 52	11 ± 26	5 ± 26
KRISS	-5 ± 48	-2 ± 35	-12 ± 25	7 ± 37	4 ± 31	1 ± 54	-3 ± 54	2 ± 30	-4 ± 30
LCIE	8 ± 53	11 ± 40	1 ± 32	20 ± 43	17 ± 37	14 ± 58	10 ± 58	15 ± 36	9 ± 36
METAS	-8 ± 48	-5 ± 34	-15 ± 24	4 ± 37	1 ± 31	-2 ± 54	-6 ± 54	-1 ± 30	-7 ± 29
NIM	-2 ± 46	1 ± 31	-9 ± 19	10 ± 34	7 ± 27	4 ± 51	0 ± 52	5 ± 26	-1 ± 25
NIST		3 ± 52	-7 ± 46	12 ± 54	9 ± 50	6 ± 66	2 ± 67	7 ± 49	1 ± 49
NPL	-3 ± 52		-10 ± 31	9 ± 42	6 ± 37	3 ± 57	-1 ± 57	4 ± 35	-2 ± 35
NPLI	7 ± 46	10 ± 31		19 ± 34	16 ± 27	13 ± 52	9 ± 52	14 ± 26	8 ± 25
NRC	-12 ± 54	-9 ± 42	-19 ± 34		-3 ± 39	-6 ± 59	-10 ± 59	-5 ± 38	-11 ± 38
PTB	-9 ± 50	-6 ± 37	-16 ± 27	3 ± 39		-3 ± 55	-7 ± 55	-2 ± 32	-8 ± 32
SP	-6 ± 66	-3 ± 57	-13 ± 52	6 ± 59	3 ± 55		-4 ± 70	1 ± 54	-5 ± 54
UME	-2 ± 67	1 ± 57	-9 ± 52	10 ± 59	7 ± 55	4 ± 70		5 ± 55	-1 ± 54
VNIIM	-7 ± 49	-4 ± 35	-14 ± 26	5 ± 38	2 ± 32	-1 ± 54	-5 ± 55		-6 ± 31
VSL	-1 ± 49	2 ± 35	-8 ± 25	11 ± 38	8 ± 32	5 ± 54	1 ± 54	6 ± 31	

Nominal Ratio: 0.1 at 1 kHz, In-Phase Voltage Ratio (KCRV $\pm$ 2σ) is (-43.6 $\pm$ 4.8) x 10^{-9} of input

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(Measured Ratio - 0.1 - KCRV) x 10^9

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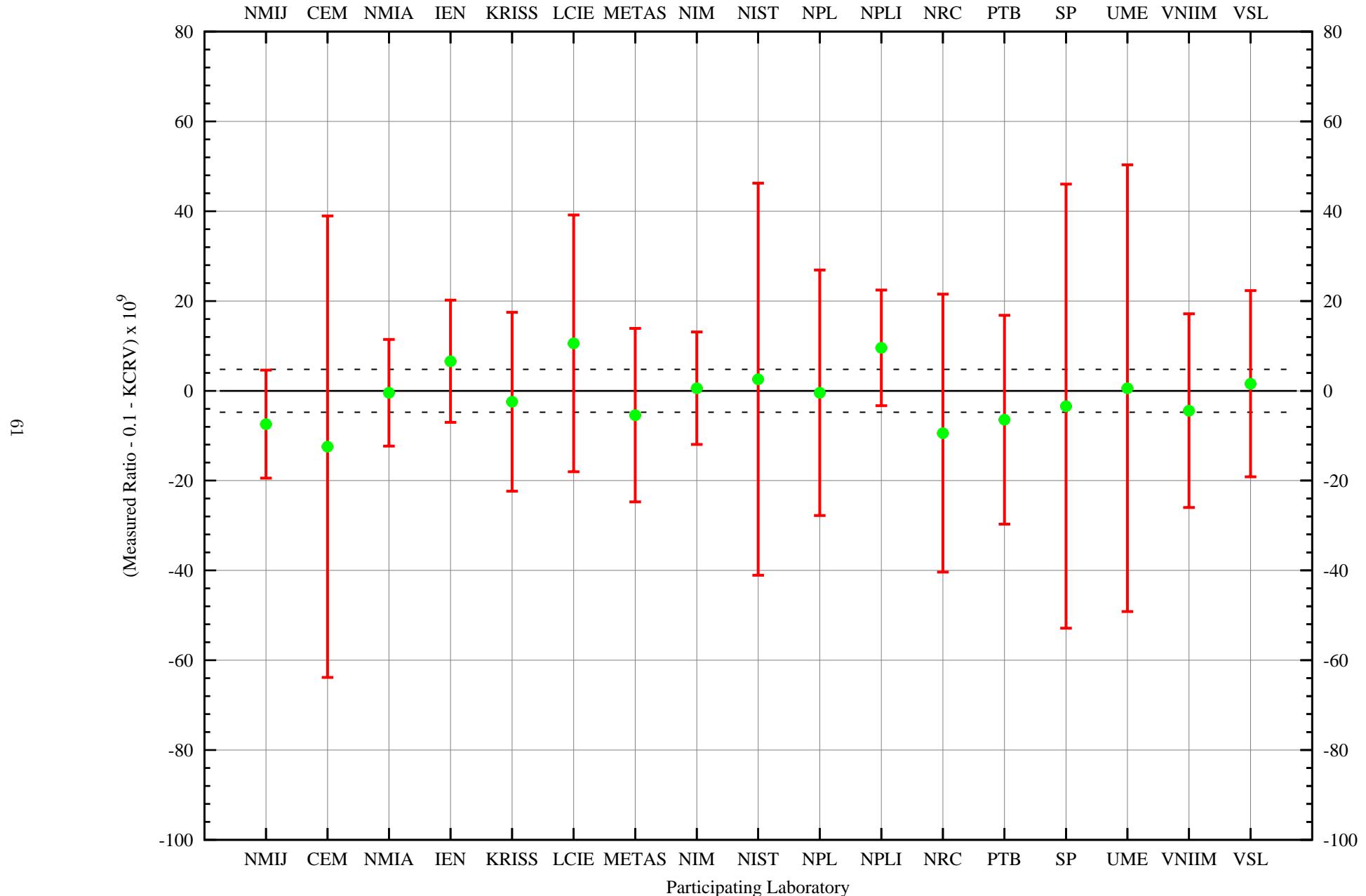
Table 50: Degree of equivalence to the KCRV for the Nominal Ratio 0.1 at 1 kHz, Quadrature Voltage Ratio (nV/V)

NMIJ	CEM	NMIA	IEN	KRISS	LCIE	METAS	NIM
3 ± 9	16 ± 48	3.1 ± 3.9	−10 ± 8	−1 ± 24	7879 ± 26	11 ± 68	−1 ± 9

NIST	NPL	NPLI	NRC	PTB	SP	UME	VNIIM	VSL
14 ± 100	−5 ± 25	−2599 ± 300	−10 ± 29	−4 ± 20	9 ± 71	4 ± 59	11 ± 28	−79 ± 110

Table 51: Laboratory - Laboratory degree of equivalence for the Nominal Ratio 0.1 at 1 kHz, Quadrature Voltage Ratio (nV/V)

	NMIJ	CEM	NMIA	IEN	KRISS	LCIE	METAS	NIM
NMIJ		−13 ± 49	0 ± 11	13 ± 13	4 ± 26	−7876 ± 28	−8 ± 68	4 ± 13
CEM	13 ± 49		13 ± 48	26 ± 49	17 ± 54	−7863 ± 55	5 ± 83	17 ± 49
NMIA	0 ± 11	−13 ± 48		13 ± 10	4 ± 25	−7876 ± 27	−8 ± 68	4 ± 11
IEN	−13 ± 13	−26 ± 49	−13 ± 10		−9 ± 26	−7889 ± 28	−21 ± 68	−9 ± 13
KRISS	−4 ± 26	−17 ± 54	−4 ± 25	9 ± 26		−7880 ± 36	−12 ± 72	0 ± 26
LCIE	7876 ± 28	7863 ± 55	7876 ± 27	7889 ± 28	7880 ± 36		7868 ± 73	7880 ± 28
METAS	8 ± 68	−5 ± 83	8 ± 68	21 ± 68	12 ± 72	−7868 ± 73		12 ± 68
NIM	−4 ± 13	−17 ± 49	−4 ± 11	9 ± 13	0 ± 26	−7880 ± 28	−12 ± 68	
NIST	11 ± 101	−2 ± 111	11 ± 100	24 ± 101	15 ± 103	−7865 ± 104	3 ± 121	15 ± 101
NPL	−8 ± 27	−21 ± 54	−8 ± 26	5 ± 27	−4 ± 35	−7884 ± 37	−16 ± 72	−4 ± 27
NPLI	−2602 ± 300	−2615 ± 304	−2602 ± 300	−2589 ± 300	−2598 ± 301	−10478 ± 301	−2610 ± 308	−2598 ± 300
NRC	−13 ± 31	−26 ± 56	−13 ± 30	0 ± 30	−9 ± 38	−7889 ± 39	−21 ± 74	−9 ± 31
PTB	−7 ± 23	−20 ± 52	−7 ± 21	6 ± 22	−3 ± 32	−7883 ± 34	−15 ± 71	−3 ± 23
SP	6 ± 72	−7 ± 86	6 ± 71	19 ± 72	10 ± 75	−7870 ± 76	−2 ± 98	10 ± 72
UME	1 ± 60	−12 ± 76	1 ± 60	14 ± 60	5 ± 64	−7875 ± 65	−7 ± 90	5 ± 60
VNIIM	8 ± 30	−5 ± 56	8 ± 29	21 ± 30	12 ± 38	−7868 ± 39	0 ± 74	12 ± 30
VSL	−82 ± 111	−95 ± 120	−82 ± 110	−69 ± 110	−78 ± 113	−7958 ± 113	−90 ± 129	−78 ± 111

	NIST	NPL	NPLI	NRC	PTB	SP	UME	VNIIM	VSL
NMIJ	−11 ± 101	8 ± 27	2602 ± 300	13 ± 31	7 ± 23	−6 ± 72	−1 ± 60	−8 ± 30	82 ± 111
CEM	2 ± 111	21 ± 54	2615 ± 304	26 ± 56	20 ± 52	7 ± 86	12 ± 76	5 ± 56	95 ± 120
NMIA	−11 ± 100	8 ± 26	2602 ± 300	13 ± 30	7 ± 21	−6 ± 71	−1 ± 60	−8 ± 29	82 ± 110
IEN	−24 ± 101	−5 ± 27	2589 ± 300	0 ± 30	−6 ± 22	−19 ± 72	−14 ± 60	−21 ± 30	69 ± 110
KRISS	−15 ± 103	4 ± 35	2598 ± 301	9 ± 38	3 ± 32	−10 ± 75	−5 ± 64	−12 ± 38	78 ± 113
LCIE	7865 ± 104	7884 ± 37	10478 ± 301	7889 ± 39	7883 ± 34	7870 ± 76	7875 ± 65	7868 ± 39	7958 ± 113
METAS	−3 ± 121	16 ± 72	2610 ± 308	21 ± 74	15 ± 71	2 ± 98	7 ± 90	0 ± 74	90 ± 129
NIM	−15 ± 101	4 ± 27	2598 ± 300	9 ± 31	3 ± 23	−10 ± 72	−5 ± 60	−12 ± 30	78 ± 111
NIST		19 ± 103	2613 ± 316	24 ± 104	18 ± 102	5 ± 123	10 ± 117	3 ± 104	93 ± 149
NPL	−19 ± 103		2594 ± 301	5 ± 38	−1 ± 33	−14 ± 76	−9 ± 65	−16 ± 38	74 ± 113
NPLI	−2613 ± 316	−2594 ± 301		−2589 ± 301	−2595 ± 301	−2608 ± 308	−2603 ± 306	−2610 ± 301	−2520 ± 320
NRC	−24 ± 104	−5 ± 38	2589 ± 301		−6 ± 36	−19 ± 77	−14 ± 66	−21 ± 41	69 ± 114
PTB	−18 ± 102	1 ± 33	2595 ± 301	6 ± 36		−13 ± 74	−8 ± 63	−15 ± 35	75 ± 112
SP	−5 ± 123	14 ± 76	2608 ± 308	19 ± 77	13 ± 74		5 ± 93	−2 ± 77	88 ± 131
UME	−10 ± 117	9 ± 65	2603 ± 306	14 ± 66	8 ± 63	−5 ± 93		−7 ± 66	83 ± 125
VNIIM	−3 ± 104	16 ± 38	2610 ± 301	21 ± 41	15 ± 35	2 ± 77	7 ± 66		90 ± 114
VSL	−93 ± 149	−74 ± 113	2520 ± 320	−69 ± 114	−75 ± 112	−88 ± 131	−83 ± 125	−90 ± 114	

Nominal Ratio: 0.1 at 1 kHz, Quadrature Voltage Ratio (KCRV $\pm$ 2σ) is (8.9 $\pm$ 3.5) x 10^{-9} of input

7879 $\pm$ 26

-2599 $\pm$ 300

(Measured Ratio - KCRV) x 10^9

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NMIJ CEM NMIA IEN KRISS LCIE METAS NIM NIST NPL NPLI NRC PTB SP UME VNIIM VSL
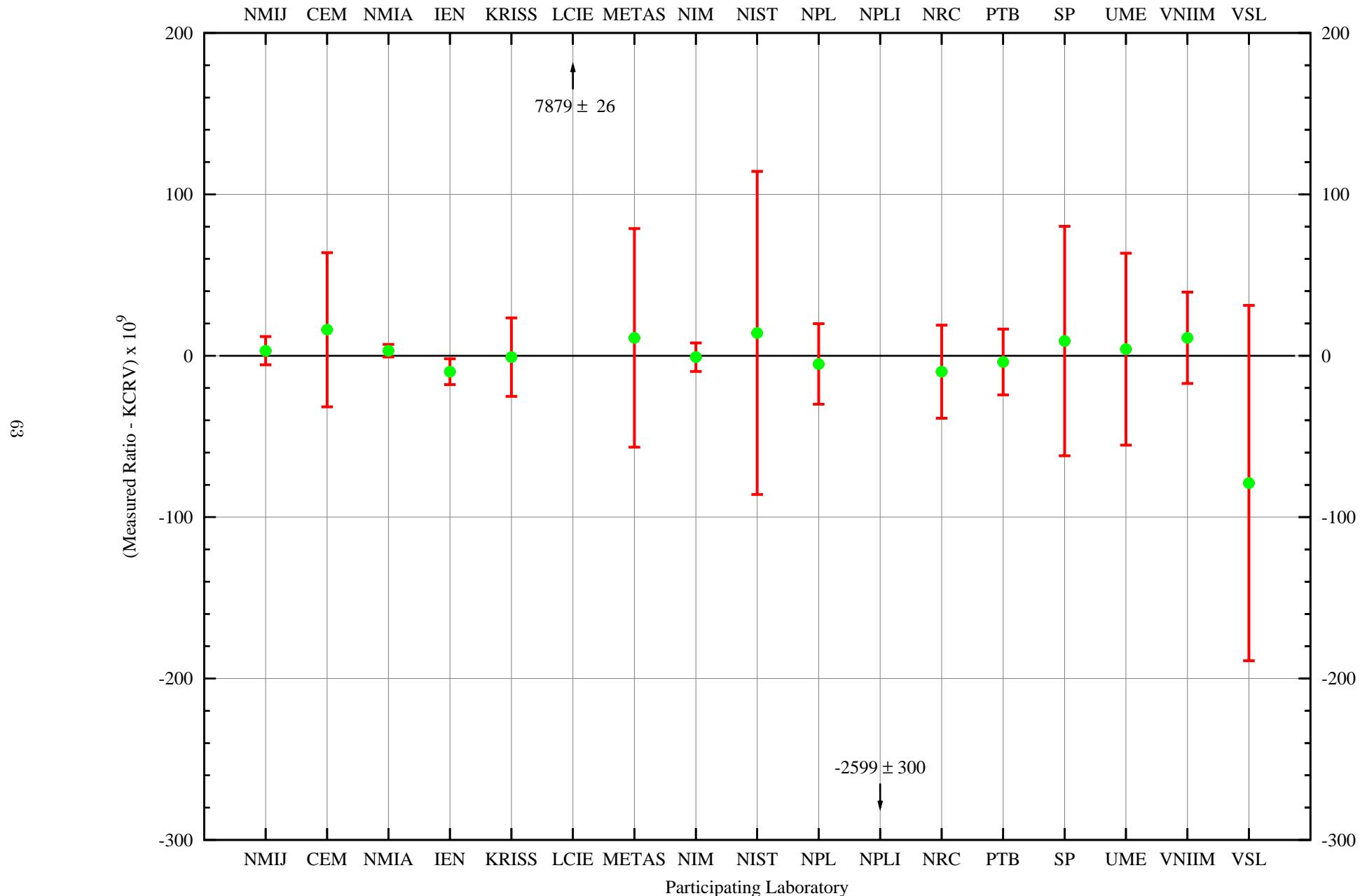
Table 52: Degree of equivalence to the KCRV for the Nominal Ratio 0.01 at 1 kHz, In-Phase Voltage Ratio (nV/V)

NMIJ	CEM	NMIA	IEN	KRISS	LCIE	METAS	NIM
−76 ± 79	−12 ± 49	2.5 ± 9.7	−78 ± 80	−38 ± 22	2428 ± 15	−78 ± 65	8 ± 13

NIST	NPL	NPLI	NRC	PTB	SP	UME	VNIIM	VSL
−57 ± 500	33 ± 50	−54 ± 11	2329 ± 61	−1 ± 51	−18 ± 49	14 ± 88	−4 ± 24	−86 ± 43

Table 53: Laboratory - Laboratory degree of equivalence for the Nominal Ratio 0.01 at 1 kHz, In-Phase Voltage Ratio (nV/V)

	NMIJ	CEM	NMIA	IEN	KRISS	LCIE	METAS	NIM
NMIJ		−64 ± 93	−79 ± 80	2 ± 113	−38 ± 83	−2504 ± 81	2 ± 103	−84 ± 81
CEM	64 ± 93		−15 ± 51	66 ± 94	26 ± 55	−2440 ± 52	66 ± 82	−20 ± 52
NMIA	79 ± 80	15 ± 51		81 ± 81	41 ± 27	−2425 ± 21	81 ± 67	−5 ± 20
IEN	−2 ± 113	−66 ± 94	−81 ± 81		−40 ± 84	−2506 ± 82	0 ± 104	−86 ± 82
KRISS	38 ± 83	−26 ± 55	−41 ± 27	40 ± 84		−2466 ± 29	40 ± 70	−46 ± 28
LCIE	2504 ± 81	2440 ± 52	2425 ± 21	2506 ± 82	2466 ± 29		2506 ± 68	2420 ± 23
METAS	−2 ± 103	−66 ± 82	−81 ± 67	0 ± 104	−40 ± 70	−2506 ± 68		−86 ± 68
NIM	84 ± 81	20 ± 52	5 ± 20	86 ± 82	46 ± 28	−2420 ± 23	86 ± 68	
NIST	19 ± 506	−45 ± 503	−60 ± 500	21 ± 507	−19 ± 501	−2485 ± 500	21 ± 505	−65 ± 500
NPL	109 ± 94	45 ± 71	30 ± 52	111 ± 95	71 ± 56	−2395 ± 53	111 ± 83	25 ± 53
NPLI	22 ± 80	−42 ± 51	−57 ± 19	24 ± 81	−16 ± 27	−2482 ± 22	24 ± 67	−62 ± 20
NRC	2405 ± 100	2341 ± 79	2326 ± 63	2407 ± 101	2367 ± 66	−99 ± 64	2407 ± 90	2321 ± 63
PTB	75 ± 94	11 ± 71	−4 ± 53	77 ± 95	37 ± 57	−2429 ± 54	77 ± 84	−9 ± 54
SP	58 ± 93	−6 ± 70	−21 ± 51	60 ± 94	20 ± 55	−2446 ± 52	60 ± 83	−26 ± 52
UME	90 ± 119	26 ± 102	11 ± 90	92 ± 120	52 ± 92	−2414 ± 90	92 ± 111	6 ± 90
VNIIM	72 ± 83	8 ± 55	−7 ± 28	74 ± 84	34 ± 35	−2432 ± 31	74 ± 71	−12 ± 30
VSL	−10 ± 91	−74 ± 66	−89 ± 46	−8 ± 91	−48 ± 50	−2514 ± 47	−8 ± 79	−94 ± 46

	NIST	NPL	NPLI	NRC	PTB	SP	UME	VNIIM	VSL
NMIJ	−19 ± 506	−109 ± 94	−22 ± 80	−2405 ± 100	−75 ± 94	−58 ± 93	−90 ± 119	−72 ± 83	10 ± 91
CEM	45 ± 503	−45 ± 71	42 ± 51	−2341 ± 79	−11 ± 71	6 ± 70	−26 ± 102	−8 ± 55	74 ± 66
NMIA	60 ± 500	−30 ± 52	57 ± 19	−2326 ± 63	4 ± 53	21 ± 51	−11 ± 90	7 ± 28	89 ± 46
IEN	−21 ± 507	−111 ± 95	−24 ± 81	−2407 ± 101	−77 ± 95	−60 ± 94	−92 ± 120	−74 ± 84	8 ± 91
KRISS	19 ± 501	−71 ± 56	16 ± 27	−2367 ± 66	−37 ± 57	−20 ± 55	−52 ± 92	−34 ± 35	48 ± 50
LCIE	2485 ± 500	2395 ± 53	2482 ± 22	99 ± 64	2429 ± 54	2446 ± 52	2414 ± 90	2432 ± 31	2514 ± 47
METAS	−21 ± 505	−111 ± 83	−24 ± 67	−2407 ± 90	−77 ± 84	−60 ± 83	−92 ± 111	−74 ± 71	8 ± 79
NIM	65 ± 500	−25 ± 53	62 ± 20	−2321 ± 63	9 ± 54	26 ± 52	−6 ± 90	12 ± 30	94 ± 46
NIST		−90 ± 503	−3 ± 500	−2386 ± 504	−56 ± 503	−39 ± 503	−71 ± 508	−53 ± 501	29 ± 502
NPL	90 ± 503		87 ± 52	−2296 ± 80	34 ± 72	51 ± 71	19 ± 102	37 ± 57	119 ± 67
NPLI	3 ± 500	−87 ± 52		−2383 ± 63	−53 ± 53	−36 ± 52	−68 ± 90	−50 ± 29	32 ± 46
NRC	2386 ± 504	2296 ± 80	2383 ± 63		2330 ± 80	2347 ± 79	2315 ± 108	2333 ± 66	2415 ± 75
PTB	56 ± 503	−34 ± 72	53 ± 53	−2330 ± 80		17 ± 72	−15 ± 103	3 ± 58	85 ± 68
SP	39 ± 503	−51 ± 71	36 ± 52	−2347 ± 79	−17 ± 72		−32 ± 102	−14 ± 56	68 ± 66
UME	71 ± 508	−19 ± 102	68 ± 90	−2315 ± 108	15 ± 103	32 ± 102		18 ± 92	100 ± 99
VNIIM	53 ± 501	−37 ± 57	50 ± 29	−2333 ± 66	−3 ± 58	14 ± 56	−18 ± 92		82 ± 51
VSL	−29 ± 502	−119 ± 67	−32 ± 46	−2415 ± 75	−85 ± 68	−68 ± 66	−100 ± 99	−82 ± 51	

Nominal Ratio: 0.01 at 1 kHz, In-Phase Voltage Ratio (KCRV $\pm$ 2σ) is (-1160.5 $\pm$ 8.4) x 10^{-9} of input

Participating Laboratory

(Measured Ratio - 0.01 - KCRV) x 10^9

NMIJ CEM NMIA IEN KRISS LCIE METAS NIM NIST NPL NPLI NRC PTB SP UME VNIIM VSL

2428 $\pm$ 15

2329 $\pm$ 61
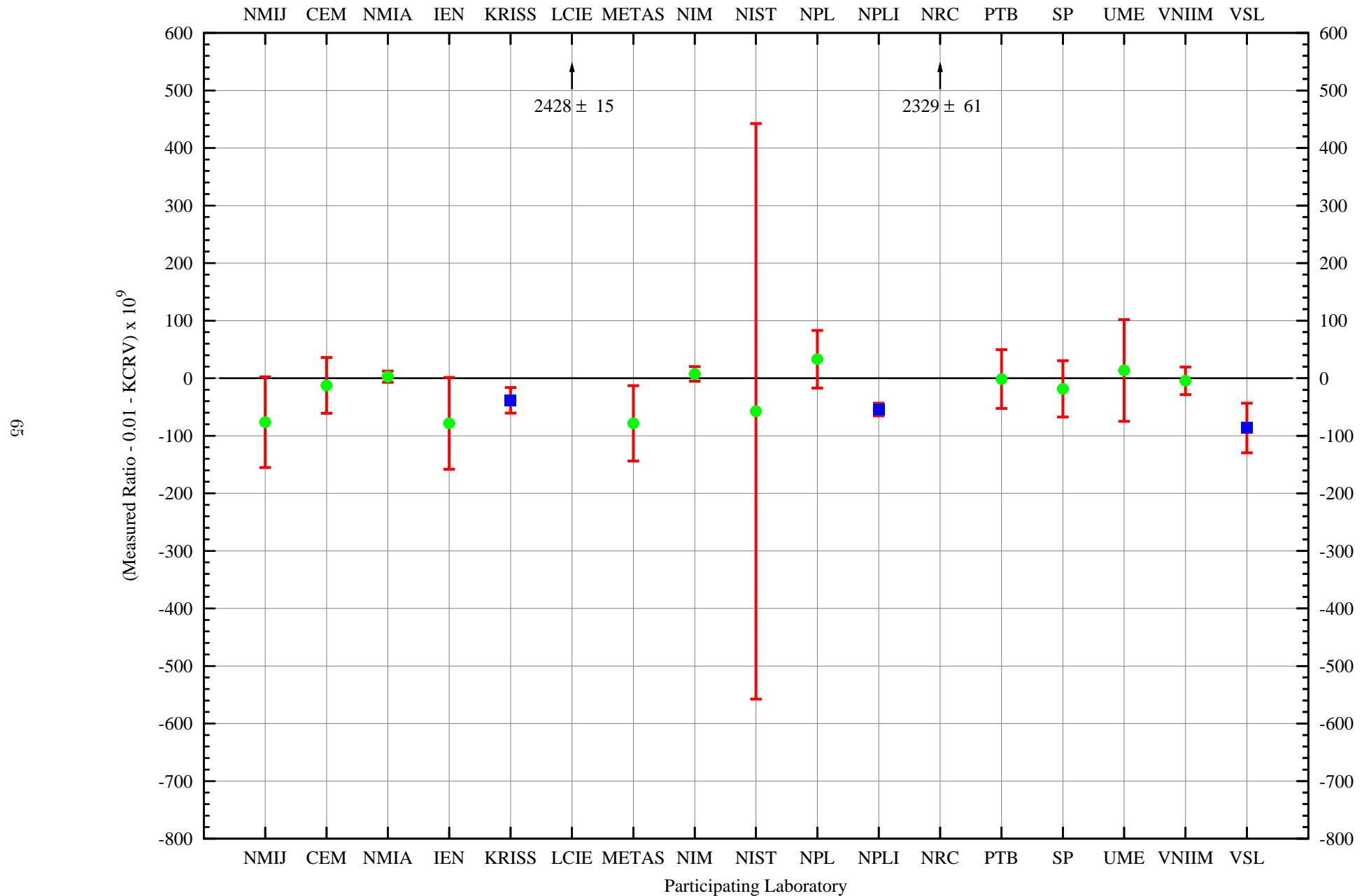
Table 54: Degree of equivalence to the KCRV for the Nominal Ratio 0.01 at 1 kHz, Quadrature Voltage Ratio (nV/V)

NMIJ	CEM	NMIA	IEN	KRISS	LCIE	METAS	NIM
65 ± 160	−9 ± 50	0.5 ± 1.5	150 ± 51	20 ± 30	527 ± 11	68 ± 85	−60 ± 8

NIST	NPL	NPLI	NRC	PTB	SP	UME	VNIIM	VSL
71 ± 500	−11 ± 49	3488 ± 300	−861 ± 60	−49 ± 100	−38 ± 71	−1094 ± 88	−36 ± 33	−2 ± 260

Table 55: Laboratory - Laboratory degree of equivalence for the Nominal Ratio 0.01 at 1 kHz, Quadrature Voltage Ratio (nV/V)

	NMIJ	CEM	NMIA	IEN	KRISS	LCIE	METAS	NIM
NMIJ		74 ± 168	64 ± 160	−85 ± 168	45 ± 163	−462 ± 161	−3 ± 181	125 ± 160
CEM	−74 ± 168		−10 ± 51	−159 ± 72	−29 ± 59	−536 ± 52	−77 ± 99	51 ± 51
NMIA	−64 ± 160	10 ± 51		−149 ± 51	−19 ± 31	−526 ± 13	−67 ± 85	61 ± 11
IEN	85 ± 168	159 ± 72	149 ± 51		130 ± 60	−377 ± 53	82 ± 99	210 ± 52
KRISS	−45 ± 163	29 ± 59	19 ± 31	−130 ± 60		−507 ± 33	−48 ± 90	80 ± 32
LCIE	462 ± 161	536 ± 52	526 ± 13	377 ± 53	507 ± 33		459 ± 86	587 ± 15
METAS	3 ± 181	77 ± 99	67 ± 85	−82 ± 99	48 ± 90	−459 ± 86		128 ± 85
NIM	−125 ± 160	−51 ± 51	−61 ± 11	−210 ± 52	−80 ± 32	−587 ± 15	−128 ± 85	
NIST	6 ± 525	80 ± 503	70 ± 500	−79 ± 503	51 ± 501	−456 ± 500	3 ± 507	131 ± 500
NPL	−75 ± 168	−1 ± 70	−11 ± 50	−160 ± 71	−30 ± 58	−537 ± 51	−78 ± 98	50 ± 50
NPLI	3423 ± 340	3497 ± 304	3487 ± 300	3338 ± 304	3468 ± 302	2961 ± 300	3420 ± 312	3548 ± 300
NRC	−926 ± 171	−852 ± 78	−862 ± 60	−1011 ± 79	−881 ± 67	−1388 ± 61	−929 ± 104	−801 ± 61
PTB	−114 ± 189	−40 ± 112	−50 ± 100	−199 ± 112	−69 ± 105	−576 ± 101	−117 ± 131	11 ± 101
SP	−103 ± 175	−29 ± 87	−39 ± 71	−188 ± 88	−58 ± 77	−565 ± 72	−106 ± 111	22 ± 72
UME	−1159 ± 183	−1085 ± 101	−1095 ± 88	−1244 ± 102	−1114 ± 93	−1621 ± 89	−1162 ± 122	−1034 ± 88
VNIIM	−101 ± 164	−27 ± 60	−37 ± 34	−186 ± 61	−56 ± 45	−563 ± 36	−104 ± 91	24 ± 35
VSL	−67 ± 305	7 ± 265	−3 ± 260	−152 ± 265	−22 ± 262	−529 ± 260	−70 ± 274	58 ± 260

	NIST	NPL	NPLI	NRC	PTB	SP	UME	VNIIM	VSL
NMIJ	−6 ± 525	75 ± 168	−3423 ± 340	926 ± 171	114 ± 189	103 ± 175	1159 ± 183	101 ± 164	67 ± 305
CEM	−80 ± 503	1 ± 70	−3497 ± 304	852 ± 78	40 ± 112	29 ± 87	1085 ± 101	27 ± 60	−7 ± 265
NMIA	−70 ± 500	11 ± 50	−3487 ± 300	862 ± 60	50 ± 100	39 ± 71	1095 ± 88	37 ± 34	3 ± 260
IEN	79 ± 503	160 ± 71	−3338 ± 304	1011 ± 79	199 ± 112	188 ± 88	1244 ± 102	186 ± 61	152 ± 265
KRISS	−51 ± 501	30 ± 58	−3468 ± 302	881 ± 67	69 ± 105	58 ± 77	1114 ± 93	56 ± 45	22 ± 262
LCIE	456 ± 500	537 ± 51	−2961 ± 300	1388 ± 61	576 ± 101	565 ± 72	1621 ± 89	563 ± 36	529 ± 260
METAS	−3 ± 507	78 ± 98	−3420 ± 312	929 ± 104	117 ± 131	106 ± 111	1162 ± 122	104 ± 91	70 ± 274
NIM	−131 ± 500	−50 ± 50	−3548 ± 300	801 ± 61	−11 ± 101	−22 ± 72	1034 ± 88	−24 ± 35	−58 ± 260
NIST		81 ± 502	−3417 ± 583	932 ± 504	120 ± 510	109 ± 505	1165 ± 508	107 ± 501	73 ± 564
NPL	−81 ± 502		−3498 ± 304	851 ± 78	39 ± 112	28 ± 87	1084 ± 101	26 ± 60	−8 ± 265
NPLI	3417 ± 583	3498 ± 304		4349 ± 306	3537 ± 316	3526 ± 308	4582 ± 313	3524 ± 302	3490 ± 397
NRC	−932 ± 504	−851 ± 78	−4349 ± 306		−812 ± 117	−823 ± 93	233 ± 107	−825 ± 69	−859 ± 267
PTB	−120 ± 510	−39 ± 112	−3537 ± 316	812 ± 117		−11 ± 123	1045 ± 133	−13 ± 106	−47 ± 279
SP	−109 ± 505	−28 ± 87	−3526 ± 308	823 ± 93	11 ± 123		1056 ± 113	−2 ± 79	−36 ± 270
UME	−1165 ± 508	−1084 ± 101	−4582 ± 313	−233 ± 107	−1045 ± 133	−1056 ± 113		−1058 ± 94	−1092 ± 275
VNIIM	−107 ± 501	−26 ± 60	−3524 ± 302	825 ± 69	13 ± 106	2 ± 79	1058 ± 94		−34 ± 262
VSL	−73 ± 564	8 ± 265	−3490 ± 397	859 ± 267	47 ± 279	36 ± 270	1092 ± 275	34 ± 262	

Nominal Ratio: 0.01 at 1 kHz, Quadrature Voltage Ratio (KCRV ± 2σ) is (422.5 ± 5.0) x 10^{-9} of input

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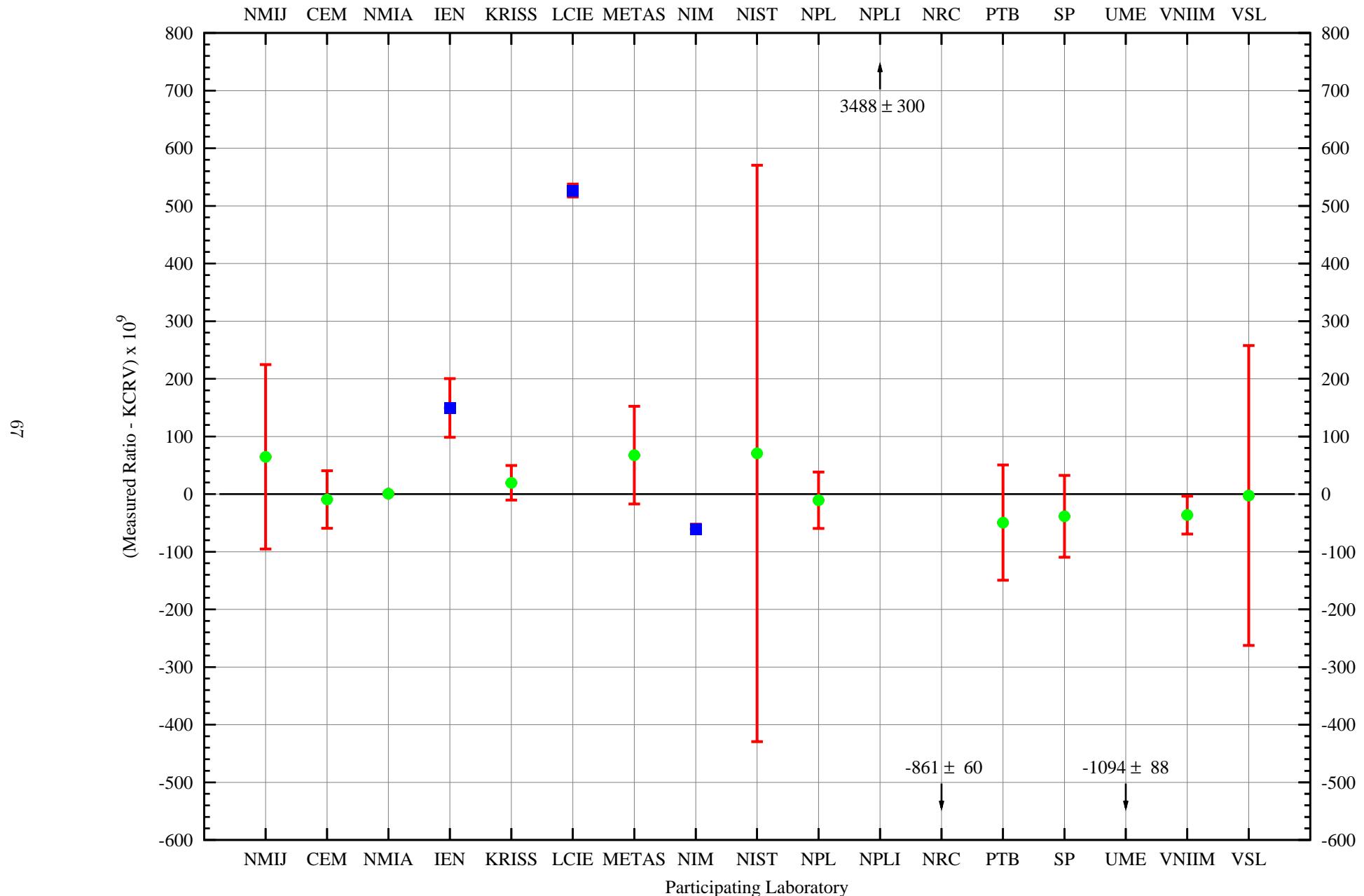
Table 56: Degree of equivalence to the KCRV for the Nominal Ratio 10/11 at 1 kHz, In-Phase Voltage Ratio (nV/V)

NMIJ	CEM	NMIA	IEN	KRISS	LCIE	METAS	NIM
11 ± 14	−2 ± 51	−0.2 ±11.7	5 ± 14	6 ± 21	109 ± 33	5 ± 18	7 ± 14

NIST	NPL	NPLI	NRC	PTB	SP	UME	VNIIM	VSL
3 ± 63	1 ± 27	−27 ± 15	−9 ± 40	−2 ± 23	−4 ± 49	−10 ± 50	−0 ± 21	2 ± 21

Table 57: Laboratory - Laboratory degree of equivalence for the Nominal Ratio 10/11 at 1 kHz, In-Phase Voltage Ratio (nV/V)

	NMIJ	CEM	NMIA	IEN	KRISS	LCIE	METAS	NIM
NMIJ		13 ± 54	11 ± 20	6 ± 21	5 ± 27	−98 ± 37	6 ± 24	4 ± 21
CEM	−13 ± 54		−2 ± 53	−7 ± 54	−8 ± 56	−111 ± 62	−7 ± 55	−9 ± 54
NMIA	−11 ± 20	2 ± 53		−5 ± 19	−6 ± 26	−109 ± 36	−5 ± 23	−7 ± 20
IEN	−6 ± 21	7 ± 54	5 ± 19		−1 ± 27	−104 ± 37	0 ± 24	−2 ± 21
KRISS	−5 ± 27	8 ± 56	6 ± 26	1 ± 27		−103 ± 40	1 ± 29	−1 ± 27
LCIE	98 ± 37	111 ± 62	109 ± 36	104 ± 37	103 ± 40		104 ± 39	102 ± 37
METAS	−6 ± 24	7 ± 55	5 ± 23	0 ± 24	−1 ± 29	−104 ± 39		−2 ± 24
NIM	−4 ± 21	9 ± 54	7 ± 20	2 ± 21	1 ± 27	−102 ± 37	2 ± 24	
NIST	−8 ± 65	5 ± 82	3 ± 65	−2 ± 65	−3 ± 67	−106 ± 72	−2 ± 66	−4 ± 65
NPL	−10 ± 32	3 ± 59	1 ± 31	−4 ± 31	−5 ± 35	−108 ± 44	−4 ± 34	−6 ± 32
NPLI	−38 ± 22	−25 ± 54	−27 ± 20	−32 ± 21	−33 ± 27	−136 ± 37	−32 ± 25	−34 ± 22
NRC	−20 ± 43	−7 ± 65	−9 ± 42	−14 ± 43	−15 ± 46	−118 ± 52	−14 ± 45	−16 ± 43
PTB	−13 ± 28	0 ± 57	−2 ± 27	−7 ± 28	−8 ± 32	−111 ± 41	−7 ± 31	−9 ± 28
SP	−15 ± 52	−2 ± 72	−4 ± 51	−9 ± 52	−10 ± 54	−113 ± 60	−9 ± 53	−11 ± 52
UME	−21 ± 52	−8 ± 72	−10 ± 52	−15 ± 52	−16 ± 55	−119 ± 60	−15 ± 54	−17 ± 52
VNIIM	−11 ± 27	2 ± 56	0 ± 26	−5 ± 27	−6 ± 31	−109 ± 40	−5 ± 29	−7 ± 27
VSL	−9 ± 26	4 ± 56	2 ± 25	−3 ± 26	−4 ± 31	−107 ± 40	−3 ± 29	−5 ± 26

	NIST	NPL	NPLI	NRC	PTB	SP	UME	VNIIM	VSL
NMIJ	8 ± 65	10 ± 32	38 ± 22	20 ± 43	13 ± 28	15 ± 52	21 ± 52	11 ± 27	9 ± 26
CEM	−5 ± 82	−3 ± 59	25 ± 54	7 ± 65	0 ± 57	2 ± 72	8 ± 72	−2 ± 56	−4 ± 56
NMIA	−3 ± 65	−1 ± 31	27 ± 20	9 ± 42	2 ± 27	4 ± 51	10 ± 52	0 ± 26	−2 ± 25
IEN	2 ± 65	4 ± 31	32 ± 21	14 ± 43	7 ± 28	9 ± 52	15 ± 52	5 ± 27	3 ± 26
KRISS	3 ± 67	5 ± 35	33 ± 27	15 ± 46	8 ± 32	10 ± 54	16 ± 55	6 ± 31	4 ± 31
LCIE	106 ± 72	108 ± 44	136 ± 37	118 ± 52	111 ± 41	113 ± 60	119 ± 60	109 ± 40	107 ± 40
METAS	2 ± 66	4 ± 34	32 ± 25	14 ± 45	7 ± 31	9 ± 53	15 ± 54	5 ± 29	3 ± 29
NIM	4 ± 65	6 ± 32	34 ± 22	16 ± 43	9 ± 28	11 ± 52	17 ± 52	7 ± 27	5 ± 26
NIST		2 ± 69	30 ± 65	12 ± 75	5 ± 68	7 ± 80	13 ± 81	3 ± 67	1 ± 67
NPL	−2 ± 69		28 ± 32	10 ± 49	3 ± 37	5 ± 57	11 ± 57	1 ± 35	−1 ± 35
NPLI	−30 ± 65	−28 ± 32		−18 ± 43	−25 ± 28	−23 ± 52	−17 ± 52	−27 ± 27	−29 ± 26
NRC	−12 ± 75	−10 ± 49	18 ± 43		−7 ± 47	−5 ± 64	1 ± 64	−9 ± 46	−11 ± 45
PTB	−5 ± 68	−3 ± 37	25 ± 28	7 ± 47		2 ± 55	8 ± 55	−2 ± 32	−4 ± 32
SP	−7 ± 80	−5 ± 57	23 ± 52	5 ± 64	−2 ± 55		6 ± 70	−4 ± 54	−6 ± 54
UME	−13 ± 81	−11 ± 57	17 ± 52	−1 ± 64	−8 ± 55	−6 ± 70		−10 ± 55	−12 ± 54
VNIIM	−3 ± 67	−1 ± 35	27 ± 27	9 ± 46	2 ± 32	4 ± 54	10 ± 55		−2 ± 31
VSL	−1 ± 67	1 ± 35	29 ± 26	11 ± 45	4 ± 32	6 ± 54	12 ± 54	2 ± 31	

Nominal Ratio: 10/11 at 1 kHz, In-Phase Voltage Ratio (KCRV ± 2σ) is (53.2 ± 5.1) x 10⁻⁹ of input
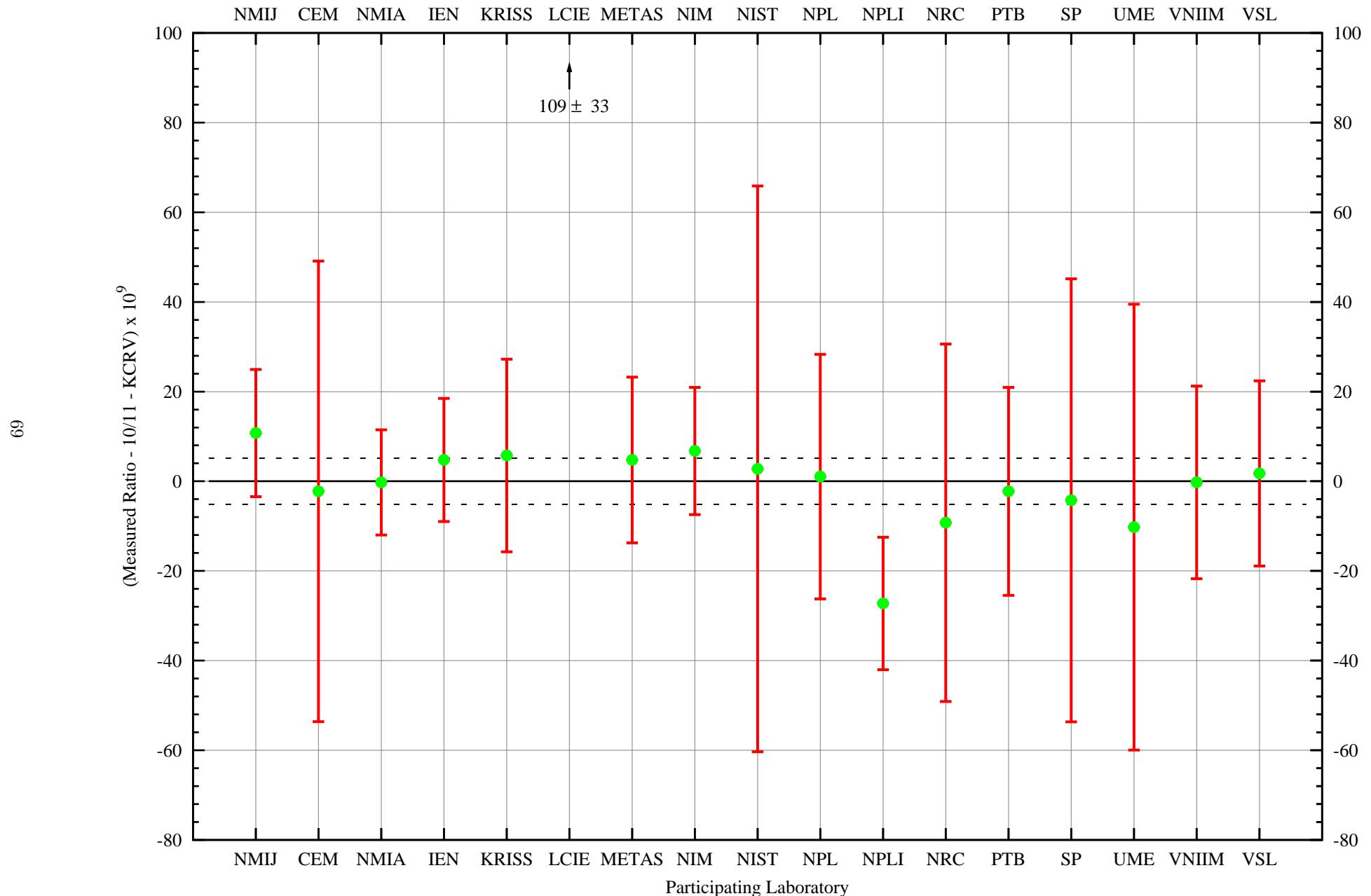
Table 58: Degree of equivalence to the KCRV for the Nominal Ratio 10/11 at 1 kHz, Quadrature Voltage Ratio (nV/V)

NMIJ	CEM	NMIA	IEN	KRISS	LCIE	METAS	NIM
-9 ± 32	10 ± 48	2.5 ± 3.5	-3 ± 8	-6 ± 24	-9902 ± 690	-0 ± 50	8 ± 12

NIST	NPL	NPLI	NRC	PTB	SP	UME	VNIIM	VSL
9 ± 120	-10 ± 25	-3496 ± 500	-33 ± 38	-13 ± 20	-1 ± 71	-21 ± 59	9 ± 28	-86 ± 120

Table 59: Laboratory - Laboratory degree of equivalence for the Nominal Ratio 10/11 at 1 kHz, Quadrature Voltage Ratio (nV/V)

	NMIJ	CEM	NMIA	IEN	KRISS	LCIE	METAS	NIM
NMIJ		-19 ± 58	-12 ± 33	-6 ± 34	-3 ± 41	9893 ± 691	-9 ± 59	-17 ± 35
CEM	19 ± 58		7 ± 48	13 ± 49	16 ± 54	9912 ± 692	10 ± 69	2 ± 50
NMIA	12 ± 33	-7 ± 48		6 ± 10	9 ± 25	9905 ± 690	3 ± 50	-5 ± 14
IEN	6 ± 34	-13 ± 49	-6 ± 10		3 ± 26	9899 ± 690	-3 ± 51	-11 ± 16
KRISS	3 ± 41	-16 ± 54	-9 ± 25	-3 ± 26		9896 ± 690	-6 ± 56	-14 ± 28
LCIE	-9893 ± 691	-9912 ± 692	-9905 ± 690	-9899 ± 690	-9896 ± 690		-9902 ± 692	-9910 ± 690
METAS	9 ± 59	-10 ± 69	-3 ± 50	3 ± 51	6 ± 56	9902 ± 692		-8 ± 51
NIM	17 ± 35	-2 ± 50	5 ± 14	11 ± 16	14 ± 28	9910 ± 690	8 ± 51	
NIST	18 ± 124	-1 ± 129	6 ± 120	12 ± 120	15 ± 123	9911 ± 700	9 ± 130	1 ± 121
NPL	-1 ± 41	-20 ± 54	-13 ± 26	-7 ± 27	-4 ± 35	9892 ± 690	-10 ± 56	-18 ± 28
NPLI	-3487 ± 501	-3506 ± 502	-3499 ± 500	-3493 ± 500	-3490 ± 501	6406 ± 852	-3496 ± 503	-3504 ± 500
NRC	-24 ± 50	-43 ± 61	-36 ± 39	-30 ± 39	-27 ± 46	9869 ± 691	-33 ± 63	-41 ± 41
PTB	-4 ± 38	-23 ± 52	-16 ± 21	-10 ± 22	-7 ± 32	9889 ± 690	-13 ± 54	-21 ± 24
SP	8 ± 78	-11 ± 86	-4 ± 71	2 ± 72	5 ± 75	9901 ± 694	-1 ± 87	-9 ± 72
UME	-12 ± 68	-31 ± 76	-24 ± 60	-18 ± 60	-15 ± 64	9881 ± 693	-21 ± 78	-29 ± 61
VNIIM	18 ± 43	-1 ± 56	6 ± 29	12 ± 30	15 ± 38	9911 ± 691	9 ± 57	1 ± 31
VSL	-77 ± 124	-96 ± 129	-89 ± 120	-83 ± 120	-80 ± 123	9816 ± 700	-86 ± 130	-94 ± 121

	NIST	NPL	NPLI	NRC	PTB	SP	UME	VNIIM	VSL
NMIJ	-18 ± 124	1 ± 41	3487 ± 501	24 ± 50	4 ± 38	-8 ± 78	12 ± 68	-18 ± 43	77 ± 124
CEM	1 ± 129	20 ± 54	3506 ± 502	43 ± 61	23 ± 52	11 ± 86	31 ± 76	1 ± 56	96 ± 129
NMIA	-6 ± 120	13 ± 26	3499 ± 500	36 ± 39	16 ± 21	4 ± 71	24 ± 60	-6 ± 29	89 ± 120
IEN	-12 ± 120	7 ± 27	3493 ± 500	30 ± 39	10 ± 22	-2 ± 72	18 ± 60	-12 ± 30	83 ± 120
KRISS	-15 ± 123	4 ± 35	3490 ± 501	27 ± 46	7 ± 32	-5 ± 75	15 ± 64	-15 ± 38	80 ± 123
LCIE	-9911 ± 700	-9892 ± 690	-6406 ± 852	-9869 ± 691	-9889 ± 690	-9901 ± 694	-9881 ± 693	-9911 ± 691	-9816 ± 700
METAS	-9 ± 130	10 ± 56	3496 ± 503	33 ± 63	13 ± 54	1 ± 87	21 ± 78	-9 ± 57	86 ± 130
NIM	-1 ± 121	18 ± 28	3504 ± 500	41 ± 41	21 ± 24	9 ± 72	29 ± 61	-1 ± 31	94 ± 121
NIST		19 ± 123	3505 ± 514	42 ± 126	22 ± 122	10 ± 140	30 ± 134	0 ± 123	95 ± 170
NPL	-19 ± 123		3486 ± 501	23 ± 46	3 ± 33	-9 ± 76	11 ± 65	-19 ± 38	76 ± 123
NPLI	-3505 ± 514	-3486 ± 501		-3463 ± 502	-3483 ± 500	-3495 ± 505	-3475 ± 504	-3505 ± 501	-3410 ± 514
NRC	-42 ± 126	-23 ± 46	3463 ± 502		-20 ± 44	-32 ± 81	-12 ± 71	-42 ± 48	53 ± 126
PTB	-22 ± 122	-3 ± 33	3483 ± 500	20 ± 44		-12 ± 74	8 ± 63	-22 ± 35	73 ± 122
SP	-10 ± 140	9 ± 76	3495 ± 505	32 ± 81	12 ± 74		20 ± 93	-10 ± 77	85 ± 140
UME	-30 ± 134	-11 ± 65	3475 ± 504	12 ± 71	-8 ± 63	-20 ± 93		-30 ± 66	65 ± 134
VNIIM	0 ± 123	19 ± 38	3505 ± 501	42 ± 48	22 ± 35	10 ± 77	30 ± 66		95 ± 123
VSL	-95 ± 170	-76 ± 123	3410 ± 514	-53 ± 126	-73 ± 122	-85 ± 140	-65 ± 134	-95 ± 123	

Nominal Ratio: 10/11 at 1 kHz, Quadrature Voltage Ratio (KCRV ± 2σ) is (-123.5 ± 3.9) x 10^{-9} of input
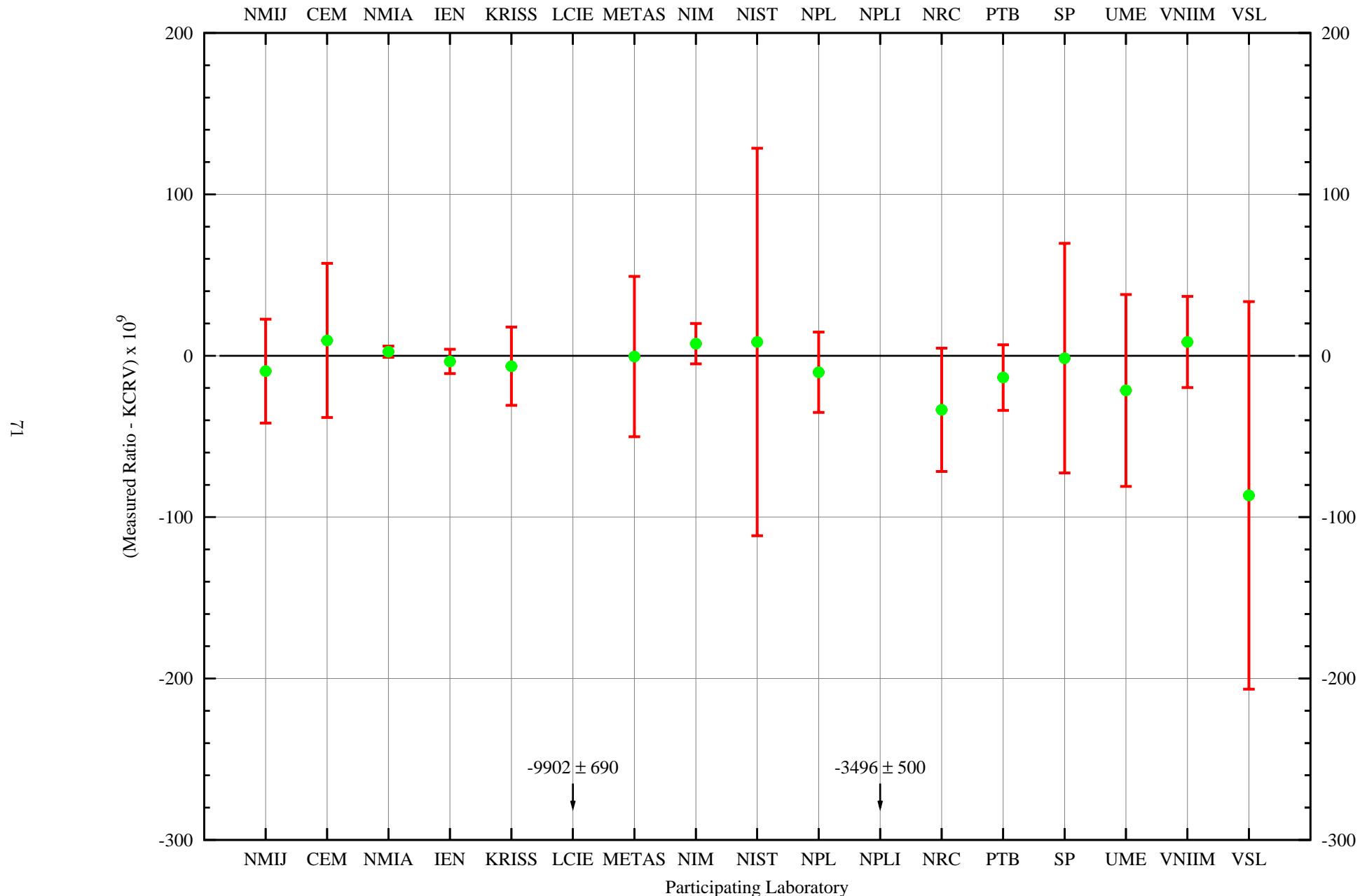
Table 60: Degree of equivalence to the KCRV for the Nominal Ratio 9/11 at 1 kHz, In-Phase Voltage Ratio (nV/V)

NMIJ	CEM	NMIA	IEN	KRISS	LCIE	METAS	NIM
6 ± 14	−20 ± 51	1.0 ±11.7	3 ± 13	3 ± 21	262 ± 36	2 ± 22	12 ± 14

NIST	NPL	NPLI	NRC	PTB	SP	UME	VNIIM	VSL
7 ± 65	1 ± 27	−15 ± 15	−20 ± 40	−5 ± 23	−1 ± 49	−15 ± 50	−2 ± 21	−10 ± 27

Table 61: Laboratory - Laboratory degree of equivalence for the Nominal Ratio 9/11 at 1 kHz, In-Phase Voltage Ratio (nV/V)

	NMIJ	CEM	NMIA	IEN	KRISS	LCIE	METAS	NIM
NMIJ		26 ± 54	5 ± 19	3 ± 21	3 ± 26	−256 ± 39	4 ± 27	−6 ± 21
CEM	−26 ± 54		−21 ± 53	−23 ± 54	−23 ± 56	−282 ± 63	−22 ± 56	−32 ± 54
NMIA	−5 ± 19	21 ± 53		−2 ± 19	−2 ± 26	−261 ± 39	−1 ± 26	−11 ± 20
IEN	−3 ± 21	23 ± 54	2 ± 19		0 ± 26	−259 ± 39	1 ± 26	−9 ± 21
KRISS	−3 ± 26	23 ± 56	2 ± 26	0 ± 26		−259 ± 43	1 ± 31	−9 ± 27
LCIE	256 ± 39	282 ± 63	261 ± 39	259 ± 39	259 ± 43		260 ± 43	250 ± 39
METAS	−4 ± 27	22 ± 56	1 ± 26	−1 ± 26	−1 ± 31	−260 ± 43		−10 ± 27
NIM	6 ± 21	32 ± 54	11 ± 20	9 ± 21	9 ± 27	−250 ± 39	10 ± 27	
NIST	1 ± 67	27 ± 83	6 ± 67	4 ± 67	4 ± 69	−255 ± 75	5 ± 69	−5 ± 67
NPL	−6 ± 31	20 ± 59	−0 ± 31	−2 ± 31	−2 ± 35	−262 ± 46	−2 ± 36	−12 ± 32
NPLI	−21 ± 21	5 ± 54	−16 ± 20	−18 ± 21	−18 ± 27	−277 ± 40	−17 ± 27	−27 ± 22
NRC	−26 ± 43	0 ± 65	−21 ± 42	−23 ± 43	−23 ± 46	−282 ± 54	−22 ± 46	−32 ± 43
PTB	−11 ± 28	15 ± 57	−6 ± 27	−8 ± 28	−8 ± 32	−267 ± 43	−7 ± 32	−17 ± 28
SP	−7 ± 52	19 ± 72	−2 ± 51	−4 ± 52	−4 ± 54	−263 ± 62	−3 ± 54	−13 ± 52
UME	−21 ± 52	5 ± 72	−16 ± 52	−18 ± 52	−18 ± 55	−277 ± 62	−17 ± 55	−27 ± 52
VNIIM	−8 ± 26	18 ± 56	−3 ± 26	−5 ± 26	−5 ± 31	−264 ± 43	−4 ± 31	−14 ± 27
VSL	−16 ± 31	10 ± 58	−11 ± 30	−13 ± 31	−13 ± 35	−272 ± 45	−12 ± 35	−22 ± 31

	NIST	NPL	NPLI	NRC	PTB	SP	UME	VNIIM	VSL
NMIJ	−1 ± 67	6 ± 31	21 ± 21	26 ± 43	11 ± 28	7 ± 52	21 ± 52	8 ± 26	16 ± 31
CEM	−27 ± 83	−20 ± 59	−5 ± 54	0 ± 65	−15 ± 57	−19 ± 72	−5 ± 72	−18 ± 56	−10 ± 58
NMIA	−6 ± 67	0 ± 31	16 ± 20	21 ± 42	6 ± 27	2 ± 51	16 ± 52	3 ± 26	11 ± 30
IEN	−4 ± 67	2 ± 31	18 ± 21	23 ± 43	8 ± 28	4 ± 52	18 ± 52	5 ± 26	13 ± 31
KRISS	−4 ± 69	2 ± 35	18 ± 27	23 ± 46	8 ± 32	4 ± 54	18 ± 55	5 ± 31	13 ± 35
LCIE	255 ± 75	262 ± 46	277 ± 40	282 ± 54	267 ± 43	263 ± 62	277 ± 62	264 ± 43	272 ± 45
METAS	−5 ± 69	2 ± 36	17 ± 27	22 ± 46	7 ± 32	3 ± 54	17 ± 55	4 ± 31	12 ± 35
NIM	5 ± 67	12 ± 32	27 ± 22	32 ± 43	17 ± 28	13 ± 52	27 ± 52	14 ± 27	22 ± 31
NIST		6 ± 71	22 ± 67	27 ± 77	12 ± 69	8 ± 82	22 ± 82	9 ± 69	17 ± 71
NPL	−6 ± 71		16 ± 32	20 ± 49	6 ± 37	2 ± 57	16 ± 57	2 ± 35	10 ± 39
NPLI	−22 ± 67	−16 ± 32		5 ± 43	−10 ± 28	−14 ± 52	0 ± 52	−13 ± 27	−5 ± 31
NRC	−27 ± 77	−20 ± 49	−5 ± 43		−15 ± 47	−19 ± 64	−5 ± 64	−18 ± 46	−10 ± 49
PTB	−12 ± 69	−6 ± 37	10 ± 28	15 ± 47		−4 ± 55	10 ± 55	−3 ± 32	5 ± 36
SP	−8 ± 82	−2 ± 57	14 ± 52	19 ± 64	4 ± 55		14 ± 70	1 ± 54	9 ± 57
UME	−22 ± 82	−16 ± 57	0 ± 52	5 ± 64	−10 ± 55	−14 ± 70		−13 ± 55	−5 ± 57
VNIIM	−9 ± 69	−2 ± 35	13 ± 27	18 ± 46	3 ± 32	−1 ± 54	13 ± 55		8 ± 35
VSL	−17 ± 71	−10 ± 39	5 ± 31	10 ± 49	−5 ± 36	−9 ± 57	5 ± 57	−8 ± 35	

Nominal Ratio: 9/11 at 1 kHz, In-Phase Voltage Ratio (KCRV $\pm$ 2σ) is (21.8 $\pm$ 5.2) x 10^{-9} of input

262 $\pm$ 36

(Measured Ratio - 9/11 - KCRV) x 10^9

Participating Laboratory

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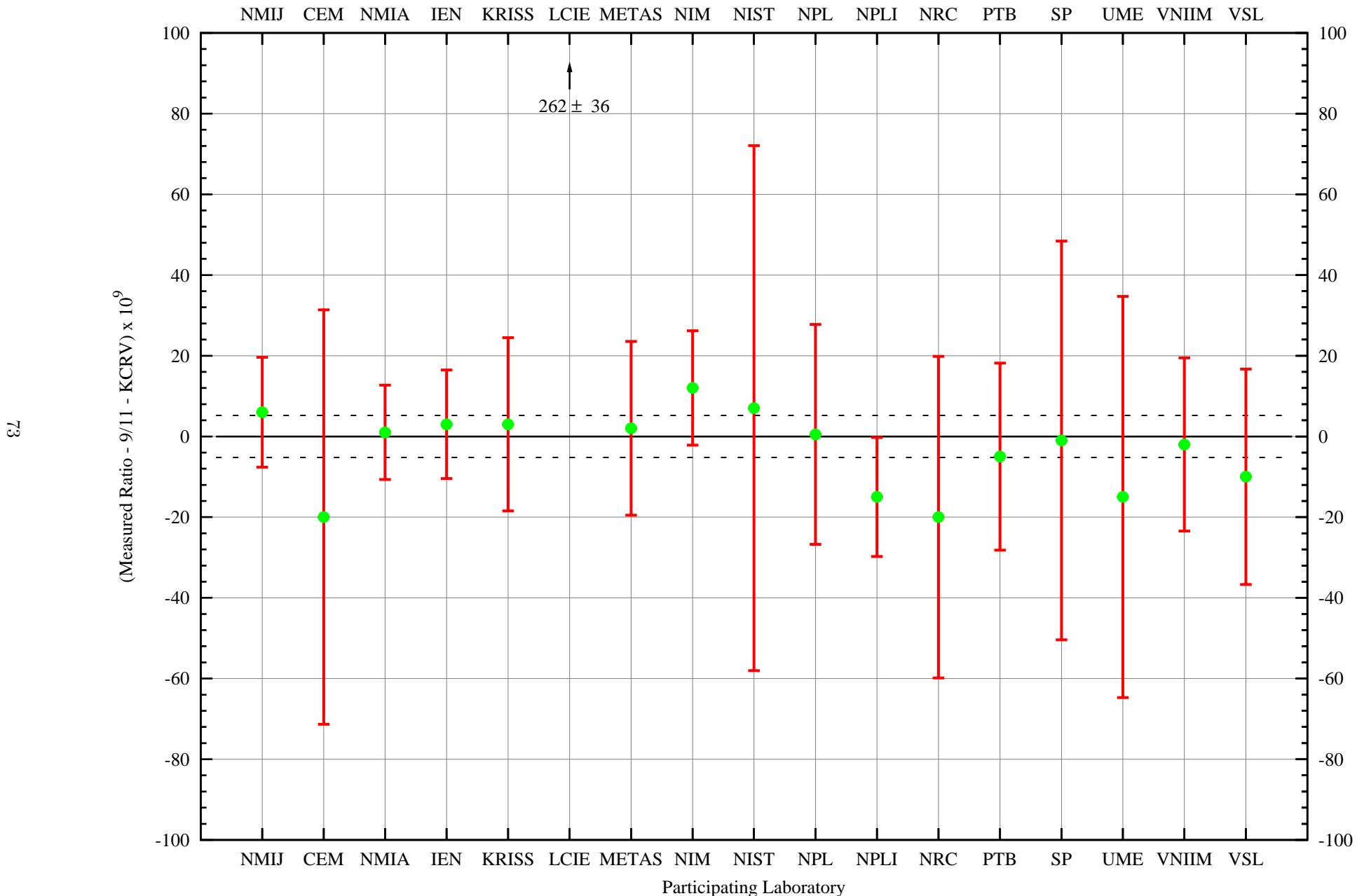
Table 62: Degree of equivalence to the KCRV for the Nominal Ratio 9/11 at 1 kHz, Quadrature Voltage Ratio (nV/V)

NMIJ	CEM	NMIA	IEN	KRISS	LCIE	METAS	NIM
−11 ± 29	20 ± 48	1.9 ± 3.1	1 ± 10	−14 ± 24	−14320 ± 690	3 ± 74	8 ± 16

NIST	NPL	NPLI	NRC	PTB	SP	UME	VNIIM	VSL
18 ± 130	−17 ± 25	−6313 ± 500	−56 ± 38	−22 ± 20	−10 ± 71	−28 ± 59	15 ± 28	−203 ± 160

Table 63: Laboratory - Laboratory degree of equivalence for the Nominal Ratio 9/11 at 1 kHz, Quadrature Voltage Ratio (nV/V)

	NMIJ	CEM	NMIA	IEN	KRISS	LCIE	METAS	NIM
NMIJ		−31 ± 56	−13 ± 30	−12 ± 31	3 ± 38	14309 ± 691	−14 ± 79	−19 ± 34
CEM	31 ± 56		18 ± 48	19 ± 49	34 ± 54	14340 ± 692	17 ± 88	12 ± 51
NMIA	13 ± 30	−18 ± 48		1 ± 12	16 ± 25	14322 ± 690	−1 ± 74	−6 ± 18
IEN	12 ± 31	−19 ± 49	−1 ± 12		15 ± 27	14321 ± 690	−2 ± 75	−7 ± 20
KRISS	−3 ± 38	−34 ± 54	−16 ± 25	−15 ± 27		14306 ± 690	−17 ± 78	−22 ± 30
LCIE	−14309 ± 691	−14340 ± 692	−14322 ± 690	−14321 ± 690	−14306 ± 690		−14323 ± 694	−14328 ± 690
METAS	14 ± 79	−17 ± 88	1 ± 74	2 ± 75	17 ± 78	14323 ± 694		−5 ± 76
NIM	19 ± 34	−12 ± 51	6 ± 18	7 ± 20	22 ± 30	14328 ± 690	5 ± 76	
NIST	29 ± 133	−2 ± 139	16 ± 130	17 ± 131	32 ± 132	14338 ± 702	15 ± 150	10 ± 131
NPL	−6 ± 39	−37 ± 54	−19 ± 26	−18 ± 27	−3 ± 35	14303 ± 690	−20 ± 78	−25 ± 30
NPLI	−6302 ± 501	−6333 ± 502	−6315 ± 500	−6314 ± 500	−6299 ± 501	8007 ± 852	−6316 ± 505	−6321 ± 500
NRC	−45 ± 48	−76 ± 61	−58 ± 39	−57 ± 40	−42 ± 46	14264 ± 691	−59 ± 83	−64 ± 42
PTB	−11 ± 36	−42 ± 52	−24 ± 21	−23 ± 23	−8 ± 32	14298 ± 690	−25 ± 77	−30 ± 27
SP	1 ± 77	−30 ± 86	−12 ± 71	−11 ± 72	4 ± 75	14310 ± 694	−13 ± 103	−18 ± 73
UME	−17 ± 66	−48 ± 76	−30 ± 60	−29 ± 61	−14 ± 64	14292 ± 693	−31 ± 95	−36 ± 62
VNIIM	26 ± 41	−5 ± 56	13 ± 29	14 ± 30	29 ± 38	14335 ± 691	12 ± 79	7 ± 33
VSL	−192 ± 163	−223 ± 167	−205 ± 160	−204 ± 160	−189 ± 162	14117 ± 708	−206 ± 176	−211 ± 161

	NIST	NPL	NPLI	NRC	PTB	SP	UME	VNIIM	VSL
NMIJ	−29 ± 133	6 ± 39	6302 ± 501	45 ± 48	11 ± 36	−1 ± 77	17 ± 66	−26 ± 41	192 ± 163
CEM	2 ± 139	37 ± 54	6333 ± 502	76 ± 61	42 ± 52	30 ± 86	48 ± 76	5 ± 56	223 ± 167
NMIA	−16 ± 130	19 ± 26	6315 ± 500	58 ± 39	24 ± 21	12 ± 71	30 ± 60	−13 ± 29	205 ± 160
IEN	−17 ± 131	18 ± 27	6314 ± 500	57 ± 40	23 ± 23	11 ± 72	29 ± 61	−14 ± 30	204 ± 160
KRISS	−32 ± 132	3 ± 35	6299 ± 501	42 ± 46	8 ± 32	−4 ± 75	14 ± 64	−29 ± 38	189 ± 162
LCIE	−14338 ± 702	−14303 ± 690	−8007 ± 852	−14264 ± 691	−14298 ± 690	−14310 ± 694	−14292 ± 693	−14335 ± 691	−14117 ± 708
METAS	−15 ± 150	20 ± 78	6316 ± 505	59 ± 83	25 ± 77	13 ± 103	31 ± 95	−12 ± 79	206 ± 176
NIM	−10 ± 131	25 ± 30	6321 ± 500	64 ± 42	30 ± 27	18 ± 73	36 ± 62	−7 ± 33	211 ± 161
NIST		35 ± 133	6331 ± 517	74 ± 136	40 ± 132	28 ± 148	46 ± 143	3 ± 133	221 ± 206
NPL	−35 ± 133		6296 ± 501	39 ± 46	5 ± 33	−7 ± 76	11 ± 65	−32 ± 38	186 ± 162
NPLI	−6331 ± 517	−6296 ± 501		−6257 ± 502	−6291 ± 500	−6303 ± 505	−6285 ± 504	−6328 ± 501	−6110 ± 525
NRC	−74 ± 136	−39 ± 46	6257 ± 502		−34 ± 44	−46 ± 81	−28 ± 71	−71 ± 48	147 ± 165
PTB	−40 ± 132	−5 ± 33	6291 ± 500	34 ± 44		−12 ± 74	6 ± 63	−37 ± 35	181 ± 161
SP	−28 ± 148	7 ± 76	6303 ± 505	46 ± 81	12 ± 74		18 ± 93	−25 ± 77	193 ± 175
UME	−46 ± 143	−11 ± 65	6285 ± 504	28 ± 71	−6 ± 63	−18 ± 93		−43 ± 66	175 ± 171
VNIIM	−3 ± 133	32 ± 38	6328 ± 501	71 ± 48	37 ± 35	25 ± 77	43 ± 66		218 ± 163
VSL	−221 ± 206	−186 ± 162	6110 ± 525	−147 ± 165	−181 ± 161	−193 ± 175	−175 ± 171	−218 ± 163	

Nominal Ratio: 9/11 at 1 kHz, Quadrature Voltage Ratio (KCRV $\pm$ 2σ) is (-176.9 $\pm$ 4.1) x 10^{-9} of input
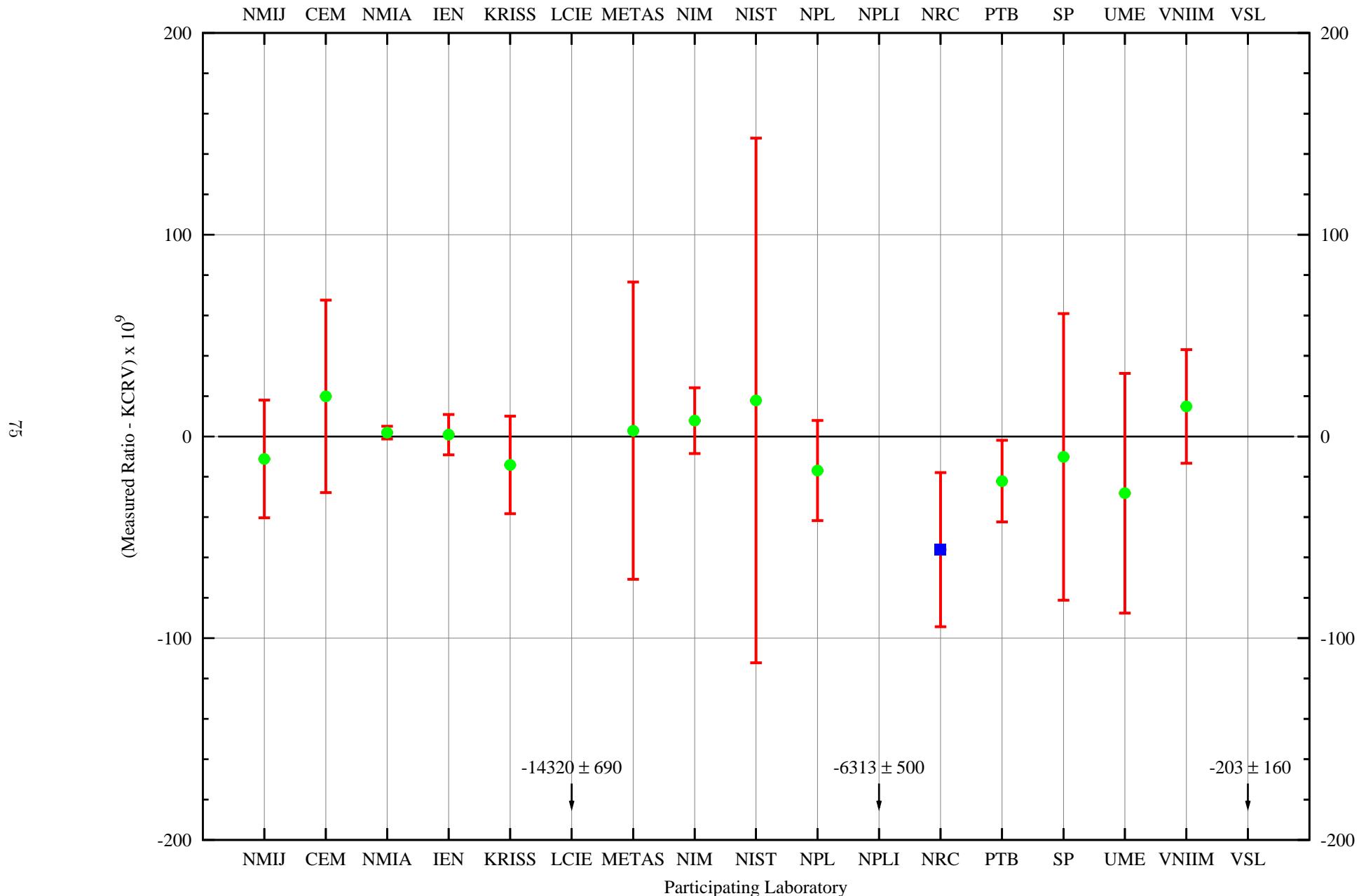
Table 64: Degree of equivalence to the KCRV for the Nominal Ratio 8/11 at 1 kHz, In-Phase Voltage Ratio (nV/V)

NMIJ	CEM	NMIA	IEN	KRISS	LCIE	METAS	NIM
2 ± 14	−17 ± 51	0.4 ±11.6	2 ± 14	2 ± 21	323 ± 39	0 ± 27	11 ± 14

NIST	NPL	NPLI	NRC	PTB	SP	UME	VNIIM	VSL
8 ± 67	−0 ± 27	−5 ± 15	−27 ± 40	−7 ± 23	−13 ± 49	−18 ± 50	−3 ± 21	−11 ± 32

Table 65: Laboratory - Laboratory degree of equivalence for the Nominal Ratio 8/11 at 1 kHz, In-Phase Voltage Ratio (nV/V)

	NMIJ	CEM	NMIA	IEN	KRISS	LCIE	METAS	NIM
NMIJ		19 ± 54	2 ± 19	0 ± 21	0 ± 26	−321 ± 42	2 ± 31	−9 ± 21
CEM	−19 ± 54		−17 ± 53	−19 ± 54	−19 ± 56	−340 ± 65	−17 ± 58	−28 ± 54
NMIA	−2 ± 19	17 ± 53		−2 ± 19	−2 ± 26	−323 ± 41	0 ± 30	−11 ± 20
IEN	0 ± 21	19 ± 54	2 ± 19		0 ± 26	−321 ± 42	2 ± 31	−9 ± 21
KRISS	0 ± 26	19 ± 56	2 ± 26	0 ± 26		−321 ± 45	2 ± 35	−9 ± 27
LCIE	321 ± 42	340 ± 65	323 ± 41	321 ± 42	321 ± 45		323 ± 48	312 ± 42
METAS	−2 ± 31	17 ± 58	0 ± 30	−2 ± 31	−2 ± 35	−323 ± 48		−11 ± 31
NIM	9 ± 21	28 ± 54	11 ± 20	9 ± 21	9 ± 27	−312 ± 42	11 ± 31	
NIST	6 ± 69	25 ± 85	8 ± 68	6 ± 69	6 ± 71	−315 ± 78	8 ± 72	−3 ± 69
NPL	−3 ± 31	16 ± 59	−1 ± 31	−3 ± 31	−3 ± 35	−324 ± 48	−1 ± 39	−12 ± 32
NPLI	−7 ± 21	12 ± 54	−5 ± 20	−7 ± 21	−7 ± 27	−328 ± 42	−5 ± 31	−16 ± 22
NRC	−29 ± 43	−10 ± 65	−27 ± 42	−29 ± 43	−29 ± 46	−350 ± 56	−27 ± 48	−38 ± 43
PTB	−9 ± 28	10 ± 57	−7 ± 27	−9 ± 28	−9 ± 32	−330 ± 46	−7 ± 36	−18 ± 28
SP	−15 ± 52	4 ± 72	−13 ± 51	−15 ± 52	−15 ± 54	−336 ± 63	−13 ± 57	−24 ± 52
UME	−20 ± 52	−1 ± 72	−18 ± 52	−20 ± 52	−20 ± 55	−341 ± 63	−18 ± 57	−29 ± 52
VNIIM	−5 ± 26	14 ± 56	−3 ± 26	−5 ± 26	−5 ± 31	−326 ± 45	−3 ± 35	−14 ± 27
VSL	−13 ± 36	6 ± 61	−11 ± 35	−13 ± 36	−13 ± 39	−334 ± 51	−11 ± 42	−22 ± 36

	NIST	NPL	NPLI	NRC	PTB	SP	UME	VNIIM	VSL
NMIJ	−6 ± 69	3 ± 31	7 ± 21	29 ± 43	9 ± 28	15 ± 52	20 ± 52	5 ± 26	13 ± 36
CEM	−25 ± 85	−16 ± 59	−12 ± 54	10 ± 65	−10 ± 57	−4 ± 72	1 ± 72	−14 ± 56	−6 ± 61
NMIA	−8 ± 68	1 ± 31	5 ± 20	27 ± 42	7 ± 27	13 ± 51	18 ± 52	3 ± 26	11 ± 35
IEN	−6 ± 69	3 ± 31	7 ± 21	29 ± 43	9 ± 28	15 ± 52	20 ± 52	5 ± 26	13 ± 36
KRISS	−6 ± 71	3 ± 35	7 ± 27	29 ± 46	9 ± 32	15 ± 54	20 ± 55	5 ± 31	13 ± 39
LCIE	315 ± 78	324 ± 48	328 ± 42	350 ± 56	330 ± 46	336 ± 63	341 ± 63	326 ± 45	334 ± 51
METAS	−8 ± 72	1 ± 39	5 ± 31	27 ± 48	7 ± 36	13 ± 57	18 ± 57	3 ± 35	11 ± 42
NIM	3 ± 69	12 ± 32	16 ± 22	38 ± 43	18 ± 28	24 ± 52	29 ± 52	14 ± 27	22 ± 36
NIST		9 ± 73	13 ± 69	35 ± 78	15 ± 71	21 ± 84	26 ± 84	11 ± 71	19 ± 75
NPL	−9 ± 73		4 ± 32	26 ± 49	6 ± 37	12 ± 57	17 ± 57	2 ± 35	10 ± 43
NPLI	−13 ± 69	−4 ± 32		22 ± 43	2 ± 28	8 ± 52	13 ± 52	−2 ± 27	6 ± 36
NRC	−35 ± 78	−26 ± 49	−22 ± 43		−20 ± 47	−14 ± 64	−9 ± 64	−24 ± 46	−16 ± 52
PTB	−15 ± 71	−6 ± 37	−2 ± 28	20 ± 47		6 ± 55	11 ± 55	−4 ± 32	4 ± 40
SP	−21 ± 84	−12 ± 57	−8 ± 52	14 ± 64	−6 ± 55		5 ± 70	−10 ± 54	−2 ± 59
UME	−26 ± 84	−17 ± 57	−13 ± 52	9 ± 64	−11 ± 55	−5 ± 70		−15 ± 55	−7 ± 60
VNIIM	−11 ± 71	−2 ± 35	2 ± 27	24 ± 46	4 ± 32	10 ± 54	15 ± 55		8 ± 39
VSL	−19 ± 75	−10 ± 43	−6 ± 36	16 ± 52	−4 ± 40	2 ± 59	7 ± 60	−8 ± 39	

Nominal Ratio: 8/11 at 1 kHz, In-Phase Voltage Ratio (KCRV ± 2σ) is (9.4 ± 5.3) x 10^{-9} of input
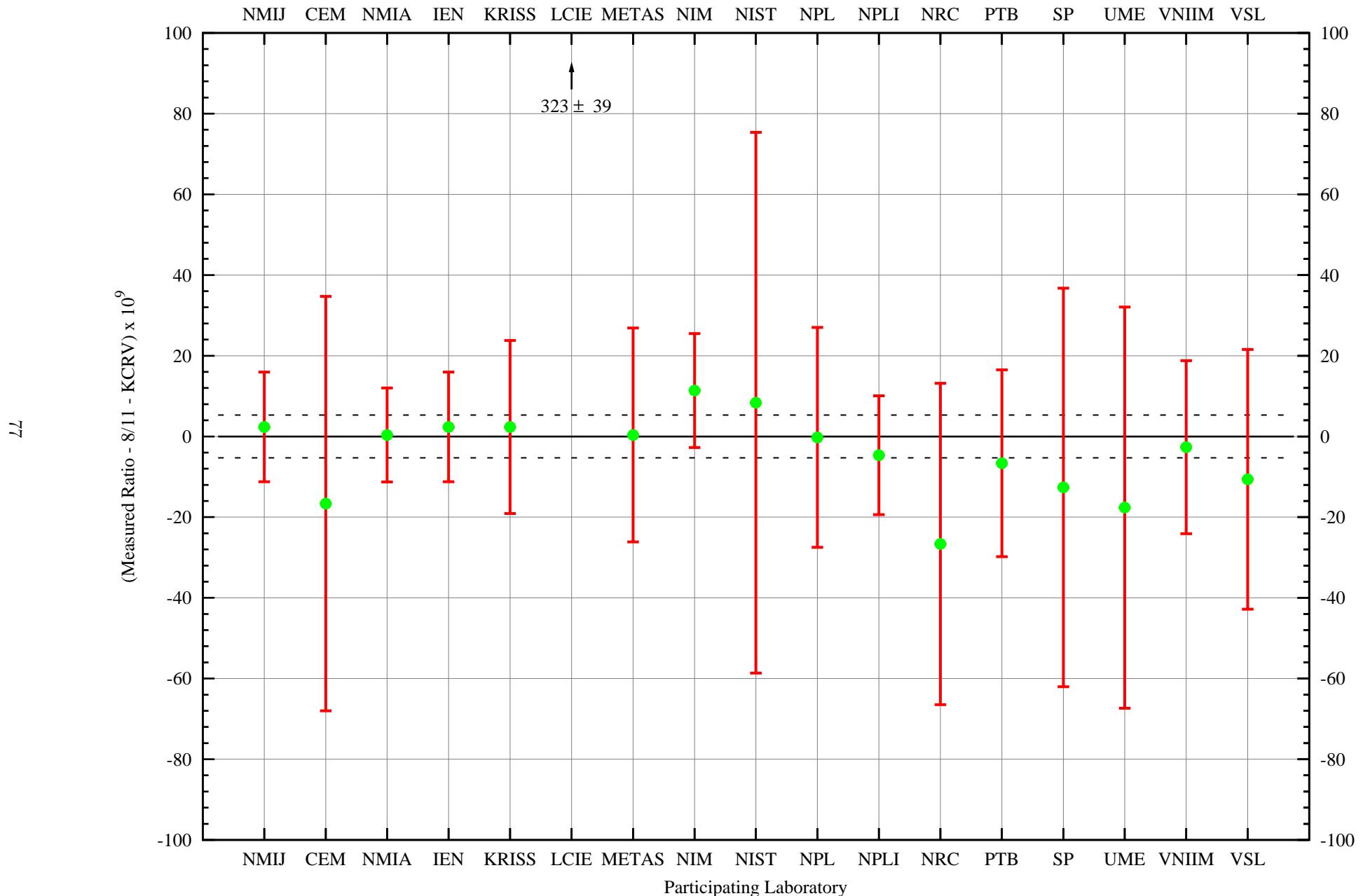
Table 66: Degree of equivalence to the KCRV for the Nominal Ratio 8/11 at 1 kHz, Quadrature Voltage Ratio (nV/V)

NMIJ	CEM	NMIA	IEN	KRISS	LCIE	METAS	NIM
−17 ± 27	25 ± 48	−1.1 ± 3.3	4 ± 12	−25 ± 24	−14532 ± 690	3 ± 103	9 ± 9

NIST	NPL	NPLI	NRC	PTB	SP	UME	VNIIM	VSL
20 ± 130	−24 ± 25	−8249 ± 500	−74 ± 38	−31 ± 20	−0 ± 71	−34 ± 59	15 ± 28	−339 ± 190

Table 67: Laboratory - Laboratory degree of equivalence for the Nominal Ratio 8/11 at 1 kHz, Quadrature Voltage Ratio (nV/V)

	NMIJ	CEM	NMIA	IEN	KRISS	LCIE	METAS	NIM
NMIJ		−42 ± 55	−16 ± 28	−21 ± 30	8 ± 37	14515 ± 691	−20 ± 106	−26 ± 29
CEM	42 ± 55		26 ± 48	21 ± 49	50 ± 54	14557 ± 692	22 ± 113	16 ± 49
NMIA	16 ± 28	−26 ± 48		−5 ± 13	24 ± 25	14531 ± 690	−4 ± 103	−10 ± 11
IEN	21 ± 30	−21 ± 49	5 ± 13		29 ± 27	14536 ± 690	1 ± 104	−5 ± 16
KRISS	−8 ± 37	−50 ± 54	−24 ± 25	−29 ± 27		14507 ± 690	−28 ± 106	−34 ± 26
LCIE	−14515 ± 691	−14557 ± 692	−14531 ± 690	−14536 ± 690	−14507 ± 690		−14535 ± 698	−14541 ± 690
METAS	20 ± 106	−22 ± 113	4 ± 103	−1 ± 104	28 ± 106	14535 ± 698		−6 ± 103
NIM	26 ± 29	−16 ± 49	10 ± 11	5 ± 16	34 ± 26	14541 ± 690	6 ± 103	
NIST	37 ± 133	−5 ± 139	21 ± 130	16 ± 131	45 ± 132	14552 ± 702	17 ± 166	11 ± 130
NPL	−7 ± 37	−49 ± 54	−23 ± 26	−28 ± 28	1 ± 35	14508 ± 690	−27 ± 106	−33 ± 27
NPLI	−8232 ± 501	−8274 ± 502	−8248 ± 500	−8253 ± 500	−8224 ± 501	6283 ± 852	−8252 ± 510	−8258 ± 500
NRC	−57 ± 47	−99 ± 61	−73 ± 39	−78 ± 40	−49 ± 46	14458 ± 691	−77 ± 110	−83 ± 40
PTB	−14 ± 34	−56 ± 52	−30 ± 21	−35 ± 24	−6 ± 32	14501 ± 690	−34 ± 105	−40 ± 23
SP	17 ± 76	−25 ± 86	1 ± 71	−4 ± 72	25 ± 75	14532 ± 694	−3 ± 125	−9 ± 72
UME	−17 ± 66	−59 ± 76	−33 ± 60	−38 ± 61	−9 ± 64	14498 ± 693	−37 ± 119	−43 ± 60
VNIIM	32 ± 40	−10 ± 56	16 ± 29	11 ± 31	40 ± 38	14547 ± 691	12 ± 107	6 ± 30
VSL	−322 ± 192	−364 ± 196	−338 ± 190	−343 ± 190	−314 ± 192	14193 ± 716	−342 ± 216	−348 ± 190

	NIST	NPL	NPLI	NRC	PTB	SP	UME	VNIIM	VSL
NMIJ	−37 ± 133	7 ± 37	8232 ± 501	57 ± 47	14 ± 34	−17 ± 76	17 ± 66	−32 ± 40	322 ± 192
CEM	5 ± 139	49 ± 54	8274 ± 502	99 ± 61	56 ± 52	25 ± 86	59 ± 76	10 ± 56	364 ± 196
NMIA	−21 ± 130	23 ± 26	8248 ± 500	73 ± 39	30 ± 21	−1 ± 71	33 ± 60	−16 ± 29	338 ± 190
IEN	−16 ± 131	28 ± 28	8253 ± 500	78 ± 40	35 ± 24	4 ± 72	38 ± 61	−11 ± 31	343 ± 190
KRISS	−45 ± 132	−1 ± 35	8224 ± 501	49 ± 46	6 ± 32	−25 ± 75	9 ± 64	−40 ± 38	314 ± 192
LCIE	−14552 ± 702	−14508 ± 690	−6283 ± 852	−14458 ± 691	−14501 ± 690	−14532 ± 694	−14498 ± 693	−14547 ± 691	−14193 ± 716
METAS	−17 ± 166	27 ± 106	8252 ± 510	77 ± 110	34 ± 105	3 ± 125	37 ± 119	−12 ± 107	342 ± 216
NIM	−11 ± 130	33 ± 27	8258 ± 500	83 ± 40	40 ± 23	9 ± 72	43 ± 60	−6 ± 30	348 ± 190
NIST		44 ± 133	8269 ± 517	94 ± 136	51 ± 132	20 ± 148	54 ± 143	5 ± 133	359 ± 230
NPL	−44 ± 133		8225 ± 501	50 ± 46	7 ± 33	−24 ± 76	10 ± 65	−39 ± 38	315 ± 192
NPLI	−8269 ± 517	−8225 ± 501		−8175 ± 502	−8218 ± 500	−8249 ± 505	−8215 ± 504	−8264 ± 501	−7910 ± 535
NRC	−94 ± 136	−50 ± 46	8175 ± 502		−43 ± 44	−74 ± 81	−40 ± 71	−89 ± 48	265 ± 194
PTB	−51 ± 132	−7 ± 33	8218 ± 500	43 ± 44		−31 ± 74	3 ± 63	−46 ± 35	308 ± 191
SP	−20 ± 148	24 ± 76	8249 ± 505	74 ± 81	31 ± 74		34 ± 93	−15 ± 77	339 ± 203
UME	−54 ± 143	−10 ± 65	8215 ± 504	40 ± 71	−3 ± 63	−34 ± 93		−49 ± 66	305 ± 199
VNIIM	−5 ± 133	39 ± 38	8264 ± 501	89 ± 48	46 ± 35	15 ± 77	49 ± 66		354 ± 192
VSL	−359 ± 230	−315 ± 192	7910 ± 535	−265 ± 194	−308 ± 191	−339 ± 203	−305 ± 199	−354 ± 192	

Nominal Ratio: 8/11 at 1 kHz, Quadrature Voltage Ratio (KCRV ± 2σ) is (-200.9 ± 4.0) x 10^{-9} of input
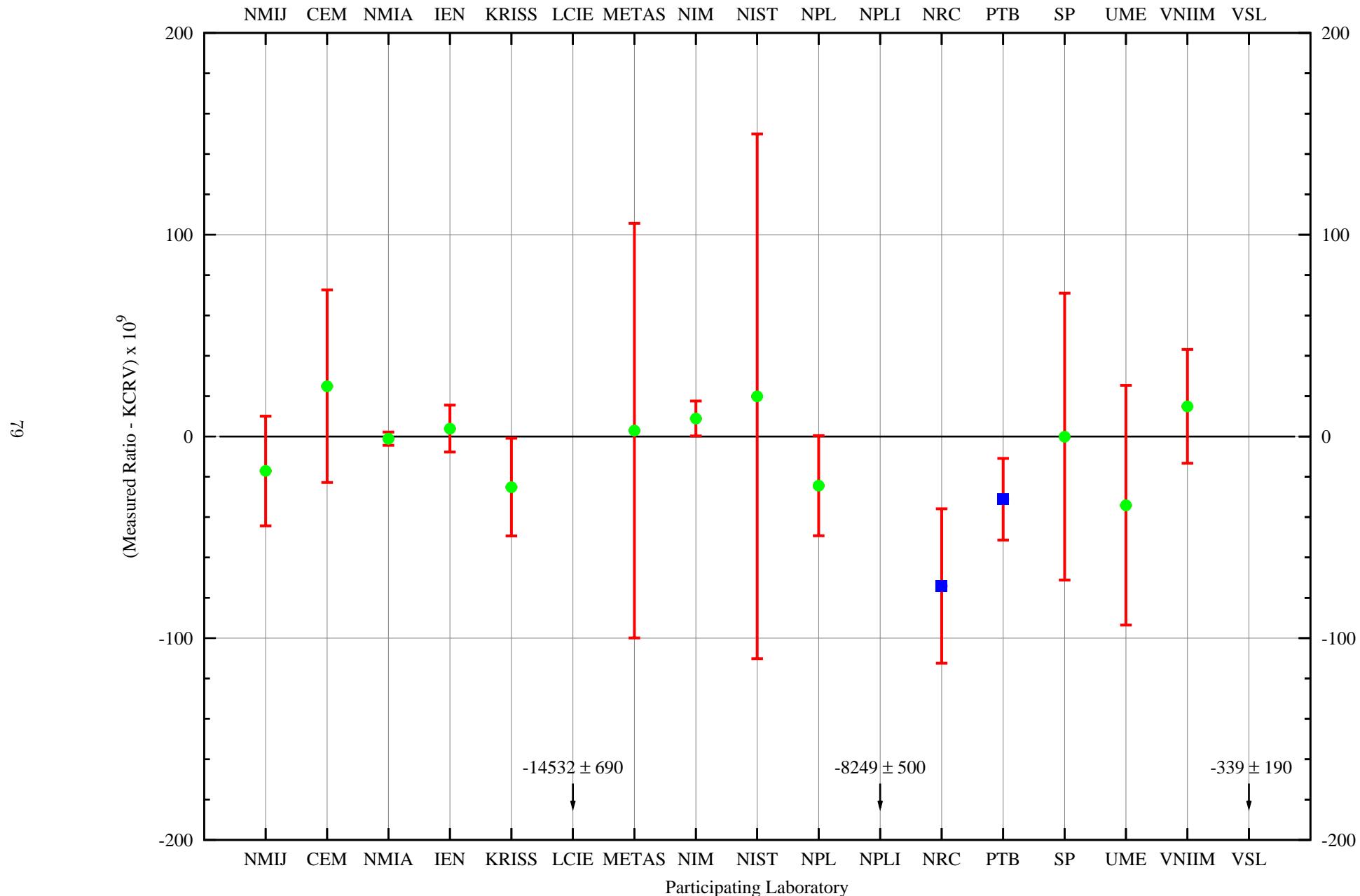
Table 68: Degree of equivalence to the KCRV for the Nominal Ratio 7/11 at 1 kHz, In-Phase Voltage Ratio (nV/V)

NMIJ	CEM	NMIA	IEN	KRISS	LCIE	METAS	NIM
−2 ± 13	−30 ± 51	−2.2 ±11.6	11 ± 14	−2 ± 21	304 ± 41	−3 ± 29	17 ± 14

NIST	NPL	NPLI	NRC	PTB	SP	UME	VNIIM	VSL
8 ± 68	−3 ± 27	2 ± 15	−33 ± 40	−11 ± 23	−7 ± 49	−20 ± 50	−9 ± 21	−20 ± 37

Table 69: Laboratory - Laboratory degree of equivalence for the Nominal Ratio 7/11 at 1 kHz, In-Phase Voltage Ratio (nV/V)

	NMIJ	CEM	NMIA	IEN	KRISS	LCIE	METAS	NIM
NMIJ		28 ± 54	0 ± 19	−13 ± 21	0 ± 26	−306 ± 43	1 ± 33	−19 ± 21
CEM	−28 ± 54		−28 ± 53	−41 ± 54	−28 ± 56	−334 ± 66	−27 ± 59	−47 ± 54
NMIA	0 ± 19	28 ± 53		−13 ± 20	0 ± 26	−306 ± 43	1 ± 32	−19 ± 20
IEN	13 ± 21	41 ± 54	13 ± 20		13 ± 27	−293 ± 44	14 ± 33	−6 ± 21
KRISS	0 ± 26	28 ± 56	0 ± 26	−13 ± 27		−306 ± 47	1 ± 37	−19 ± 27
LCIE	306 ± 43	334 ± 66	306 ± 43	293 ± 44	306 ± 47		307 ± 50	287 ± 44
METAS	−1 ± 33	27 ± 59	−1 ± 32	−14 ± 33	−1 ± 37	−307 ± 50		−20 ± 33
NIM	19 ± 21	47 ± 54	19 ± 20	6 ± 21	19 ± 27	−287 ± 44	20 ± 33	
NIST	10 ± 70	38 ± 86	10 ± 69	−3 ± 70	10 ± 72	−296 ± 80	11 ± 74	−9 ± 70
NPL	−1 ± 31	27 ± 59	−1 ± 31	−14 ± 32	−1 ± 35	−307 ± 50	0 ± 40	−20 ± 32
NPLI	4 ± 21	32 ± 54	4 ± 20	−9 ± 22	4 ± 27	−302 ± 44	5 ± 33	−15 ± 22
NRC	−31 ± 43	−3 ± 65	−31 ± 42	−44 ± 43	−31 ± 46	−337 ± 57	−30 ± 50	−50 ± 43
PTB	−9 ± 28	19 ± 57	−9 ± 27	−22 ± 28	−9 ± 32	−315 ± 47	−8 ± 38	−28 ± 28
SP	−5 ± 52	23 ± 72	−5 ± 51	−18 ± 52	−5 ± 54	−311 ± 64	−4 ± 58	−24 ± 52
UME	−18 ± 52	10 ± 72	−18 ± 52	−31 ± 52	−18 ± 55	−324 ± 65	−17 ± 58	−37 ± 52
VNIIM	−7 ± 26	21 ± 56	−7 ± 26	−20 ± 27	−7 ± 31	−313 ± 47	−6 ± 37	−26 ± 27
VSL	−18 ± 40	10 ± 64	−18 ± 39	−31 ± 40	−18 ± 43	−324 ± 55	−17 ± 47	−37 ± 40

	NIST	NPL	NPLI	NRC	PTB	SP	UME	VNIIM	VSL
NMIJ	−10 ± 70	1 ± 31	−4 ± 21	31 ± 43	9 ± 28	5 ± 52	18 ± 52	7 ± 26	18 ± 40
CEM	−38 ± 86	−27 ± 59	−32 ± 54	3 ± 65	−19 ± 57	−23 ± 72	−10 ± 72	−21 ± 56	−10 ± 64
NMIA	−10 ± 69	1 ± 31	−4 ± 20	31 ± 42	9 ± 27	5 ± 51	18 ± 52	7 ± 26	18 ± 39
IEN	3 ± 70	14 ± 32	9 ± 22	44 ± 43	22 ± 28	18 ± 52	31 ± 52	20 ± 27	31 ± 40
KRISS	−10 ± 72	1 ± 35	−4 ± 27	31 ± 46	9 ± 32	5 ± 54	18 ± 55	7 ± 31	18 ± 43
LCIE	296 ± 80	307 ± 50	302 ± 44	337 ± 57	315 ± 47	311 ± 64	324 ± 65	313 ± 47	324 ± 55
METAS	−11 ± 74	−0 ± 40	−5 ± 33	30 ± 50	8 ± 38	4 ± 58	17 ± 58	6 ± 37	17 ± 47
NIM	9 ± 70	20 ± 32	15 ± 22	50 ± 43	28 ± 28	24 ± 52	37 ± 52	26 ± 27	37 ± 40
NIST		11 ± 74	6 ± 70	41 ± 79	19 ± 72	15 ± 84	28 ± 85	17 ± 72	28 ± 78
NPL	−11 ± 74		−5 ± 32	30 ± 49	8 ± 37	4 ± 57	17 ± 57	6 ± 35	17 ± 46
NPLI	−6 ± 70	5 ± 32		35 ± 43	13 ± 28	9 ± 52	22 ± 52	11 ± 27	22 ± 40
NRC	−41 ± 79	−30 ± 49	−35 ± 43		−22 ± 47	−26 ± 64	−13 ± 64	−24 ± 46	−13 ± 55
PTB	−19 ± 72	−8 ± 37	−13 ± 28	22 ± 47		−4 ± 55	9 ± 55	−2 ± 32	9 ± 44
SP	−15 ± 84	−4 ± 57	−9 ± 52	26 ± 64	4 ± 55		13 ± 70	2 ± 54	13 ± 62
UME	−28 ± 85	−17 ± 57	−22 ± 52	13 ± 64	−9 ± 55	−13 ± 70		−11 ± 55	0 ± 62
VNIIM	−17 ± 72	−6 ± 35	−11 ± 27	24 ± 46	2 ± 32	−2 ± 54	11 ± 55		11 ± 43
VSL	−28 ± 78	−17 ± 46	−22 ± 40	13 ± 55	−9 ± 44	−13 ± 62	0 ± 62	−11 ± 43	

Nominal Ratio: 7/11 at 1 kHz, In-Phase Voltage Ratio (KCRV $\pm$ 2σ) is (-6.2 $\pm$ 5.3) x 10^{-9} of input
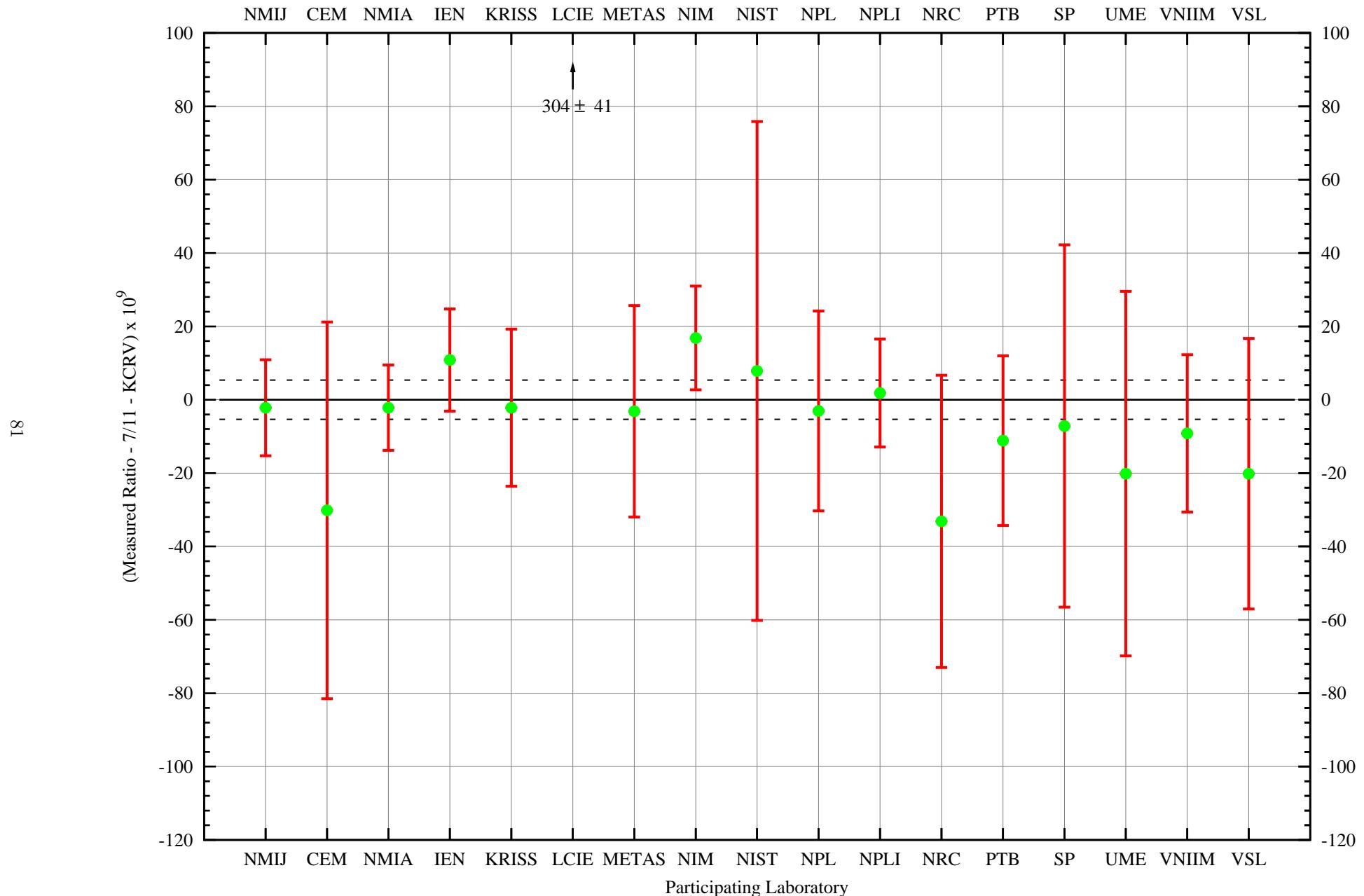
Table 70: Degree of equivalence to the KCRV for the Nominal Ratio 7/11 at 1 kHz, Quadrature Voltage Ratio (nV/V)

NMIJ	CEM	NMIA	IEN	KRISS	LCIE	METAS	NIM
−14 ± 25	36 ± 48	1.6 ± 2.7	−22 ± 13	−31 ± 24	−12227 ± 690	10 ± 114	4 ± 12

NIST	NPL	NPLI	NRC	PTB	SP	UME	VNIIM	VSL
25 ± 130	−24 ± 25	−9553 ± 500	−78 ± 38	−31 ± 20	1 ± 71	−29 ± 59	20 ± 28	−453 ± 210

Table 71: Laboratory - Laboratory degree of equivalence for the Nominal Ratio 7/11 at 1 kHz, Quadrature Voltage Ratio (nV/V)

	NMIJ	CEM	NMIA	IEN	KRISS	LCIE	METAS	NIM
NMIJ		−50 ± 54	−16 ± 26	8 ± 29	17 ± 35	12213 ± 690	−24 ± 117	−18 ± 29
CEM	50 ± 54		34 ± 48	58 ± 50	67 ± 54	12263 ± 692	26 ± 124	32 ± 50
NMIA	16 ± 26	−34 ± 48		24 ± 15	33 ± 25	12229 ± 690	−8 ± 114	−2 ± 14
IEN	−8 ± 29	−58 ± 50	−24 ± 15		9 ± 28	12205 ± 690	−32 ± 115	−26 ± 19
KRISS	−17 ± 35	−67 ± 54	−33 ± 25	−9 ± 28		12196 ± 690	−41 ± 117	−35 ± 28
LCIE	−12213 ± 690	−12263 ± 692	−12229 ± 690	−12205 ± 690	−12196 ± 690		−12237 ± 699	−12231 ± 690
METAS	24 ± 117	−26 ± 124	8 ± 114	32 ± 115	41 ± 117	12237 ± 699		6 ± 115
NIM	18 ± 29	−32 ± 50	2 ± 14	26 ± 19	35 ± 28	12231 ± 690	−6 ± 115	
NIST	39 ± 133	−11 ± 139	23 ± 130	47 ± 131	56 ± 132	12252 ± 702	15 ± 173	21 ± 131
NPL	−10 ± 36	−60 ± 54	−26 ± 26	−2 ± 29	7 ± 35	12203 ± 690	−34 ± 117	−28 ± 28
NPLI	−9539 ± 501	−9589 ± 502	−9555 ± 500	−9531 ± 500	−9522 ± 501	2674 ± 852	−9563 ± 513	−9557 ± 500
NRC	−64 ± 46	−114 ± 61	−80 ± 39	−56 ± 41	−47 ± 46	12149 ± 691	−88 ± 120	−82 ± 41
PTB	−17 ± 33	−67 ± 52	−33 ± 21	−9 ± 25	0 ± 32	12196 ± 690	−41 ± 116	−35 ± 24
SP	15 ± 76	−35 ± 86	−1 ± 71	23 ± 73	32 ± 75	12228 ± 694	−9 ± 134	−3 ± 72
UME	−15 ± 65	−65 ± 76	−31 ± 60	−7 ± 61	2 ± 64	12198 ± 693	−39 ± 129	−33 ± 61
VNIIM	34 ± 38	−16 ± 56	18 ± 29	42 ± 32	51 ± 38	12247 ± 691	10 ± 118	16 ± 31
VSL	−439 ± 212	−489 ± 215	−455 ± 210	−431 ± 211	−422 ± 211	11774 ± 721	−463 ± 239	−457 ± 210

	NIST	NPL	NPLI	NRC	PTB	SP	UME	VNIIM	VSL
NMIJ	−39 ± 133	10 ± 36	9539 ± 501	64 ± 46	17 ± 33	−15 ± 76	15 ± 65	−34 ± 38	439 ± 212
CEM	11 ± 139	60 ± 54	9589 ± 502	114 ± 61	67 ± 52	35 ± 86	65 ± 76	16 ± 56	489 ± 215
NMIA	−23 ± 130	26 ± 26	9555 ± 500	80 ± 39	33 ± 21	1 ± 71	31 ± 60	−18 ± 29	455 ± 210
IEN	−47 ± 131	2 ± 29	9531 ± 500	56 ± 41	9 ± 25	−23 ± 73	7 ± 61	−42 ± 32	431 ± 211
KRISS	−56 ± 132	−7 ± 35	9522 ± 501	47 ± 46	0 ± 32	−32 ± 75	−2 ± 64	−51 ± 38	422 ± 211
LCIE	−12252 ± 702	−12203 ± 690	−2674 ± 852	−12149 ± 691	−12196 ± 690	−12228 ± 694	−12198 ± 693	−12247 ± 691	−11774 ± 721
METAS	−15 ± 173	34 ± 117	9563 ± 513	88 ± 120	41 ± 116	9 ± 134	39 ± 129	−10 ± 118	463 ± 239
NIM	−21 ± 131	28 ± 28	9557 ± 500	82 ± 41	35 ± 24	3 ± 72	33 ± 61	−16 ± 31	457 ± 210
NIST		49 ± 133	9578 ± 517	103 ± 136	56 ± 132	24 ± 148	54 ± 143	5 ± 133	478 ± 247
NPL	−49 ± 133		9529 ± 501	54 ± 46	7 ± 33	−25 ± 76	5 ± 65	−44 ± 38	429 ± 212
NPLI	−9578 ± 517	−9529 ± 501		−9475 ± 502	−9522 ± 500	−9554 ± 505	−9524 ± 504	−9573 ± 501	−9100 ± 542
NRC	−103 ± 136	−54 ± 46	9475 ± 502		−47 ± 44	−79 ± 81	−49 ± 71	−98 ± 48	375 ± 214
PTB	−56 ± 132	−7 ± 33	9522 ± 500	47 ± 44		−32 ± 74	−2 ± 63	−51 ± 35	422 ± 211
SP	−24 ± 148	25 ± 76	9554 ± 505	79 ± 81	32 ± 74		30 ± 93	−19 ± 77	454 ± 222
UME	−54 ± 143	−5 ± 65	9524 ± 504	49 ± 71	2 ± 63	−30 ± 93		−49 ± 66	424 ± 218
VNIIM	−5 ± 133	44 ± 38	9573 ± 501	98 ± 48	51 ± 35	19 ± 77	49 ± 66		473 ± 212
VSL	−478 ± 247	−429 ± 212	9100 ± 542	−375 ± 214	−422 ± 211	−454 ± 222	−424 ± 218	−473 ± 212	

Nominal Ratio: 7/11 at 1 kHz, Quadrature Voltage Ratio (KCRV ± 2σ) is (-186.6 ± 4.5) x 10^{-9} of input

$(Measured\ Ratio - KCRV) \times 10^9$

Participating Laboratory

NMIJ CEM NMIA IEN KRISS LCIE METAS NIM NIST NPL NPLI NRC PTB SP UME VNIIM VSL

-12227 ± 690

-9553 ± 500

-453 ± 210
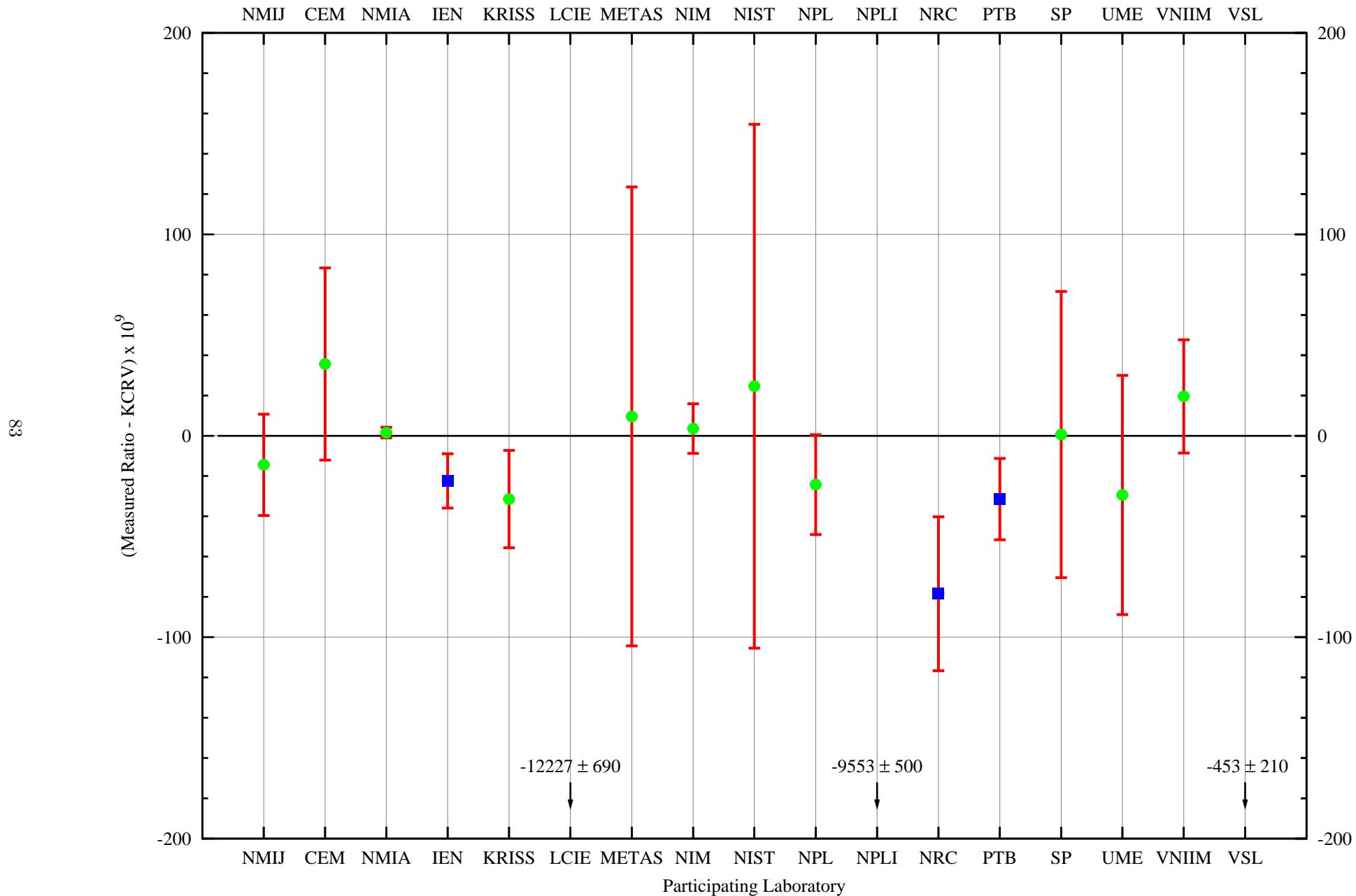
Table 72: Degree of equivalence to the KCRV for the Nominal Ratio 6/11 at 1 kHz, In-Phase Voltage Ratio (nV/V)

NMIJ	CEM	NMIA	IEN	KRISS	LCIE	METAS	NIM
−0 ± 13	−28 ± 51	−1.4 ±11.6	−1 ± 13	−2 ± 21	193 ± 42	−2 ± 30	16 ± 14

NIST	NPL	NPLI	NRC	PTB	SP	UME	VNIIM	VSL
10 ± 69	−2 ± 27	11 ± 15	−33 ± 40	−8 ± 23	−13 ± 49	−19 ± 50	−8 ± 21	−17 ± 42

Table 73: Laboratory - Laboratory degree of equivalence for the Nominal Ratio 6/11 at 1 kHz, In-Phase Voltage Ratio (nV/V)

	NMIJ	CEM	NMIA	IEN	KRISS	LCIE	METAS	NIM
NMIJ		28 ± 54	1 ± 19	1 ± 20	2 ± 26	−193 ± 44	2 ± 34	−16 ± 21
CEM	−28 ± 54		−27 ± 53	−27 ± 54	−26 ± 56	−221 ± 67	−26 ± 60	−44 ± 54
NMIA	−1 ± 19	27 ± 53		0 ± 19	1 ± 26	−194 ± 44	1 ± 33	−17 ± 20
IEN	−1 ± 20	27 ± 54	0 ± 19		1 ± 26	−194 ± 44	1 ± 34	−17 ± 21
KRISS	−2 ± 26	26 ± 56	−1 ± 26	−1 ± 26		−195 ± 47	0 ± 38	−18 ± 27
LCIE	193 ± 44	221 ± 67	194 ± 44	194 ± 44	195 ± 47		195 ± 52	177 ± 45
METAS	−2 ± 34	26 ± 60	−1 ± 33	−1 ± 34	0 ± 38	−195 ± 52		−18 ± 34
NIM	16 ± 21	44 ± 54	17 ± 20	17 ± 21	18 ± 27	−177 ± 45	18 ± 34	
NIST	10 ± 71	38 ± 86	11 ± 70	11 ± 71	12 ± 73	−183 ± 81	12 ± 76	−6 ± 71
NPL	−2 ± 31	26 ± 59	−1 ± 31	−1 ± 31	0 ± 35	−195 ± 50	0 ± 42	−18 ± 32
NPLI	11 ± 21	39 ± 54	12 ± 20	12 ± 21	13 ± 27	−182 ± 45	13 ± 35	−5 ± 22
NRC	−33 ± 43	−5 ± 65	−32 ± 42	−32 ± 43	−31 ± 46	−226 ± 58	−31 ± 51	−49 ± 43
PTB	−8 ± 28	20 ± 57	−7 ± 27	−7 ± 28	−6 ± 32	−201 ± 48	−6 ± 39	−24 ± 28
SP	−13 ± 52	15 ± 72	−12 ± 51	−12 ± 52	−11 ± 54	−206 ± 65	−11 ± 59	−29 ± 52
UME	−19 ± 52	9 ± 72	−18 ± 52	−18 ± 52	−17 ± 55	−212 ± 65	−17 ± 59	−35 ± 52
VNIIM	−8 ± 26	20 ± 56	−7 ± 26	−7 ± 26	−6 ± 31	−201 ± 47	−6 ± 38	−24 ± 27
VSL	−17 ± 44	11 ± 67	−16 ± 44	−16 ± 44	−15 ± 47	−210 ± 59	−15 ± 52	−33 ± 45

	NIST	NPL	NPLI	NRC	PTB	SP	UME	VNIIM	VSL
NMIJ	−10 ± 71	2 ± 31	−11 ± 21	33 ± 43	8 ± 28	13 ± 52	19 ± 52	8 ± 26	17 ± 44
CEM	−38 ± 86	−26 ± 59	−39 ± 54	5 ± 65	−20 ± 57	−15 ± 72	−9 ± 72	−20 ± 56	−11 ± 67
NMIA	−11 ± 70	1 ± 31	−12 ± 20	32 ± 42	7 ± 27	12 ± 51	18 ± 52	7 ± 26	16 ± 44
IEN	−11 ± 71	1 ± 31	−12 ± 21	32 ± 43	7 ± 28	12 ± 52	18 ± 52	7 ± 26	16 ± 44
KRISS	−12 ± 73	−0 ± 35	−13 ± 27	31 ± 46	6 ± 32	11 ± 54	17 ± 55	6 ± 31	15 ± 47
LCIE	183 ± 81	195 ± 50	182 ± 45	226 ± 58	201 ± 48	206 ± 65	212 ± 65	201 ± 47	210 ± 59
METAS	−12 ± 76	−0 ± 42	−13 ± 35	31 ± 51	6 ± 39	11 ± 59	17 ± 59	6 ± 38	15 ± 52
NIM	6 ± 71	18 ± 32	5 ± 22	49 ± 43	24 ± 28	29 ± 52	35 ± 52	24 ± 27	33 ± 45
NIST		12 ± 75	−1 ± 71	43 ± 80	18 ± 73	23 ± 85	29 ± 85	18 ± 73	27 ± 81
NPL	−12 ± 75		−13 ± 32	31 ± 49	6 ± 37	11 ± 57	17 ± 57	6 ± 35	15 ± 50
NPLI	1 ± 71	13 ± 32		44 ± 43	19 ± 28	24 ± 52	30 ± 52	19 ± 27	28 ± 45
NRC	−43 ± 80	−31 ± 49	−44 ± 43		−25 ± 47	−20 ± 64	−14 ± 64	−25 ± 46	−16 ± 58
PTB	−18 ± 73	−6 ± 37	−19 ± 28	25 ± 47		5 ± 55	11 ± 55	0 ± 32	9 ± 48
SP	−23 ± 85	−11 ± 57	−24 ± 52	20 ± 64	−5 ± 55		6 ± 70	−5 ± 54	4 ± 65
UME	−29 ± 85	−17 ± 57	−30 ± 52	14 ± 64	−11 ± 55	−6 ± 70		−11 ± 55	−2 ± 65
VNIIM	−18 ± 73	−6 ± 35	−19 ± 27	25 ± 46	0 ± 32	5 ± 54	11 ± 55		9 ± 47
VSL	−27 ± 81	−15 ± 50	−28 ± 45	16 ± 58	−9 ± 48	−4 ± 65	2 ± 65	−9 ± 47	

Nominal Ratio: 6/11 at 1 kHz, In-Phase Voltage Ratio (KCRV ± 2σ) is (-17.1 ± 5.3) x 10^{-9} of input

193 ± 42

(Measured Ratio - 6/11 - KCRV) x 10^9

Participating Laboratory

NMIJ CEM NMIA IEN KRISS LCIE METAS NIM NIST NPL NPLI NRC PTB SP UME VNIIM VSL

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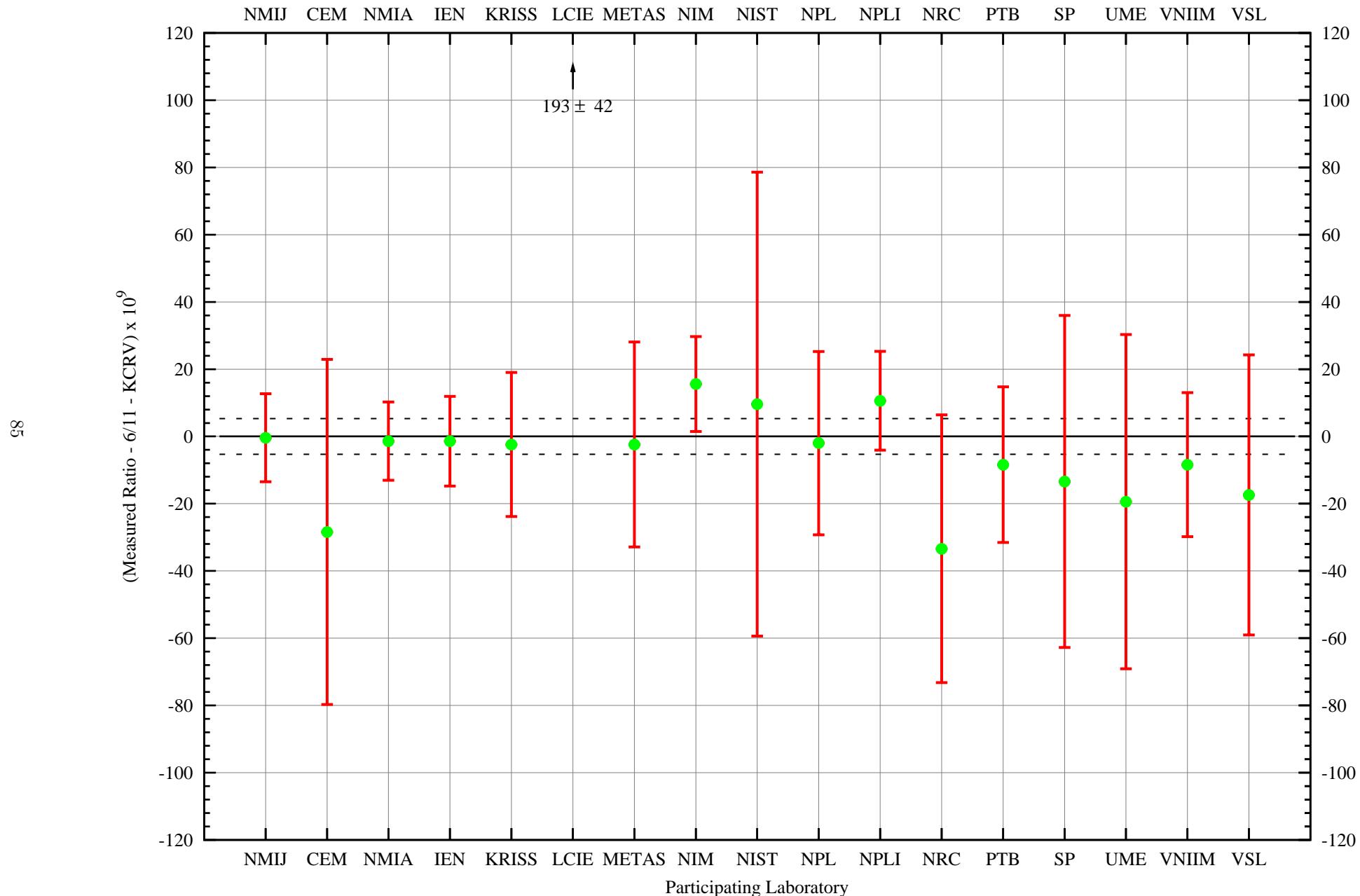
Table 74: Degree of equivalence to the KCRV for the Nominal Ratio 6/11 at 1 kHz, Quadrature Voltage Ratio (nV/V)

NMIJ	CEM	NMIA	IEN	KRISS	LCIE	METAS	NIM
−16 ± 23	38 ± 48	0.5 ± 2.9	11 ± 13	−35 ± 24	−8656 ± 690	9 ± 124	−8 ± 12

NIST	NPL	NPLI	NRC	PTB	SP	UME	VNIIM	VSL
21 ± 130	−27 ± 25	−10164 ± 500	−82 ± 38	−35 ± 20	6 ± 71	−28 ± 59	17 ± 28	−514 ± 230

Table 75: Laboratory - Laboratory degree of equivalence for the Nominal Ratio 6/11 at 1 kHz, Quadrature Voltage Ratio (nV/V)

	NMIJ	CEM	NMIA	IEN	KRISS	LCIE	METAS	NIM
NMIJ		−54 ± 53	−16 ± 24	−27 ± 27	19 ± 34	8640 ± 690	−25 ± 127	−8 ± 27
CEM	54 ± 53		38 ± 48	27 ± 50	73 ± 54	8694 ± 692	29 ± 133	46 ± 50
NMIA	16 ± 24	−38 ± 48		−11 ± 14	35 ± 25	8656 ± 690	−9 ± 125	8 ± 14
IEN	27 ± 27	−27 ± 50	11 ± 14		46 ± 28	8667 ± 690	2 ± 125	19 ± 19
KRISS	−19 ± 34	−73 ± 54	−35 ± 25	−46 ± 28		8621 ± 690	−44 ± 127	−27 ± 28
LCIE	−8640 ± 690	−8694 ± 692	−8656 ± 690	−8667 ± 690	−8621 ± 690		−8665 ± 701	−8648 ± 690
METAS	25 ± 127	−29 ± 133	9 ± 125	−2 ± 125	44 ± 127	8665 ± 701		17 ± 125
NIM	8 ± 27	−46 ± 50	−8 ± 14	−19 ± 19	27 ± 28	8648 ± 690	−17 ± 125	
NIST	37 ± 132	−17 ± 139	21 ± 130	10 ± 131	56 ± 132	8677 ± 702	12 ± 180	29 ± 131
NPL	−12 ± 34	−66 ± 54	−28 ± 26	−39 ± 28	7 ± 35	8628 ± 690	−37 ± 127	−20 ± 28
NPLI	−10148 ± 501	−10202 ± 502	−10164 ± 500	−10175 ± 500	−10129 ± 501	−1508 ± 852	−10173 ± 515	−10156 ± 500
NRC	−66 ± 45	−120 ± 61	−82 ± 39	−93 ± 41	−47 ± 46	8574 ± 691	−91 ± 130	−74 ± 41
PTB	−19 ± 31	−73 ± 52	−35 ± 21	−46 ± 25	0 ± 32	8621 ± 690	−44 ± 126	−27 ± 24
SP	22 ± 75	−32 ± 86	6 ± 71	−5 ± 72	41 ± 75	8662 ± 694	−3 ± 143	14 ± 72
UME	−12 ± 64	−66 ± 76	−28 ± 60	−39 ± 61	7 ± 64	8628 ± 693	−37 ± 138	−20 ± 61
VNIIM	33 ± 37	−21 ± 56	17 ± 29	6 ± 31	52 ± 38	8673 ± 691	8 ± 128	25 ± 31
VSL	−498 ± 231	−552 ± 235	−514 ± 230	−525 ± 230	−479 ± 231	8142 ± 727	−523 ± 262	−506 ± 230

	NIST	NPL	NPLI	NRC	PTB	SP	UME	VNIIM	VSL
NMIJ	−37 ± 132	12 ± 34	10148 ± 501	66 ± 45	19 ± 31	−22 ± 75	12 ± 64	−33 ± 37	498 ± 231
CEM	17 ± 139	66 ± 54	10202 ± 502	120 ± 61	73 ± 52	32 ± 86	66 ± 76	21 ± 56	552 ± 235
NMIA	−21 ± 130	28 ± 26	10164 ± 500	82 ± 39	35 ± 21	−6 ± 71	28 ± 60	−17 ± 29	514 ± 230
IEN	−10 ± 131	39 ± 28	10175 ± 500	93 ± 41	46 ± 25	5 ± 72	39 ± 61	−6 ± 31	525 ± 230
KRISS	−56 ± 132	−7 ± 35	10129 ± 501	47 ± 46	0 ± 32	−41 ± 75	−7 ± 64	−52 ± 38	479 ± 231
LCIE	−8677 ± 702	−8628 ± 690	1508 ± 852	−8574 ± 691	−8621 ± 690	−8662 ± 694	−8628 ± 693	−8673 ± 691	−8142 ± 727
METAS	−12 ± 180	37 ± 127	10173 ± 515	91 ± 130	44 ± 126	3 ± 143	37 ± 138	−8 ± 128	523 ± 262
NIM	−29 ± 131	20 ± 28	10156 ± 500	74 ± 41	27 ± 24	−14 ± 72	20 ± 61	−25 ± 31	506 ± 230
NIST		49 ± 133	10185 ± 517	103 ± 136	56 ± 132	15 ± 148	49 ± 143	4 ± 133	535 ± 264
NPL	−49 ± 133		10136 ± 501	54 ± 46	7 ± 33	−34 ± 76	0 ± 65	−45 ± 38	486 ± 231
NPLI	−10185 ± 517	−10136 ± 501		−10082 ± 502	−10129 ± 500	−10170 ± 505	−10136 ± 504	−10181 ± 501	−9650 ± 550
NRC	−103 ± 136	−54 ± 46	10082 ± 502		−47 ± 44	−88 ± 81	−54 ± 71	−99 ± 48	432 ± 233
PTB	−56 ± 132	−7 ± 33	10129 ± 500	47 ± 44		−41 ± 74	−7 ± 63	−52 ± 35	479 ± 231
SP	−15 ± 148	34 ± 76	10170 ± 505	88 ± 81	41 ± 74		34 ± 93	−11 ± 77	520 ± 241
UME	−49 ± 143	−0 ± 65	10136 ± 504	54 ± 71	7 ± 63	−34 ± 93		−45 ± 66	486 ± 238
VNIIM	−4 ± 133	45 ± 38	10181 ± 501	99 ± 48	52 ± 35	11 ± 77	45 ± 66		531 ± 232
VSL	−535 ± 264	−486 ± 231	9650 ± 550	−432 ± 233	−479 ± 231	−520 ± 241	−486 ± 238	−531 ± 232	

Nominal Ratio: 6/11 at 1 kHz, Quadrature Voltage Ratio (KCRV ± 2σ) is (-156.5 ± 4.3) x 10⁻⁹ of input
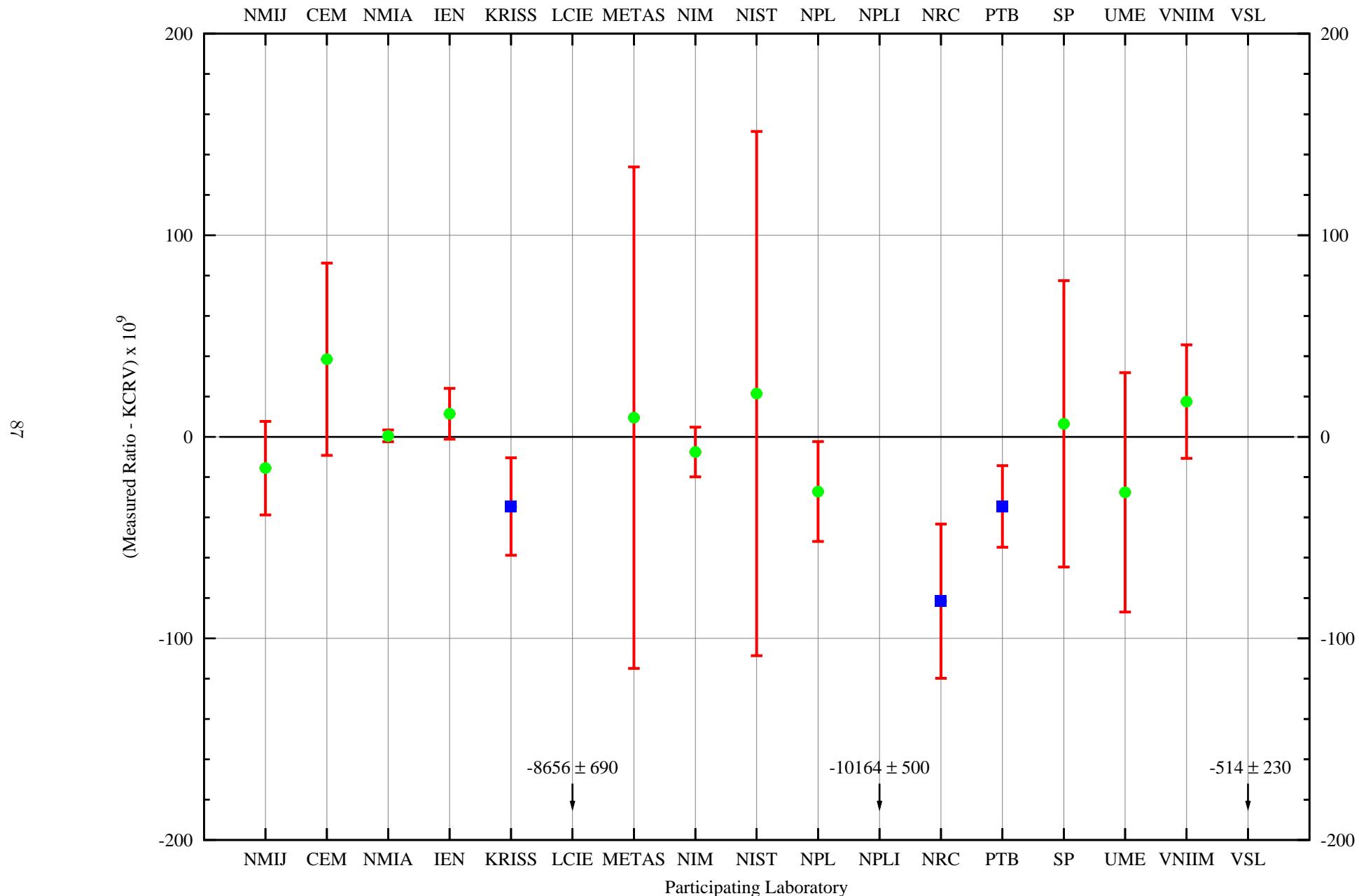
Table 76: Degree of equivalence to the KCRV for the Nominal Ratio 5/11 at 1 kHz, In-Phase Voltage Ratio (nV/V)

NMIJ	CEM	NMIA	IEN	KRISS	LCIE	METAS	NIM
3 ± 13	−32 ± 51	−3.4 ±11.6	5 ± 16	−4 ± 21	−33 ± 42	−3 ± 31	15 ± 14

NIST	NPL	NPLI	NRC	PTB	SP	UME	VNIIM	VSL
8 ± 69	−3 ± 27	12 ± 15	−32 ± 40	−9 ± 23	−9 ± 49	−18 ± 50	−11 ± 21	−9 ± 42

Table 77: Laboratory - Laboratory degree of equivalence for the Nominal Ratio 5/11 at 1 kHz, In-Phase Voltage Ratio (nV/V)

	NMIJ	CEM	NMIA	IEN	KRISS	LCIE	METAS	NIM
NMIJ		35 ± 53	6 ± 19	−2 ± 22	7 ± 26	36 ± 44	6 ± 35	−12 ± 20
CEM	−35 ± 53		−29 ± 53	−37 ± 54	−28 ± 56	1 ± 67	−29 ± 61	−47 ± 54
NMIA	−6 ± 19	29 ± 53		−8 ± 21	1 ± 26	30 ± 44	0 ± 34	−18 ± 20
IEN	2 ± 22	37 ± 54	8 ± 21		9 ± 28	38 ± 45	8 ± 36	−10 ± 22
KRISS	−7 ± 26	28 ± 56	−1 ± 26	−9 ± 28		29 ± 47	−1 ± 39	−19 ± 27
LCIE	−36 ± 44	−1 ± 67	−30 ± 44	−38 ± 45	−29 ± 47		−30 ± 53	−48 ± 45
METAS	−6 ± 35	29 ± 61	0 ± 34	−8 ± 36	1 ± 39	30 ± 53		−18 ± 35
NIM	12 ± 20	47 ± 54	18 ± 20	10 ± 22	19 ± 27	48 ± 45	18 ± 35	
NIST	5 ± 71	40 ± 86	11 ± 70	3 ± 71	12 ± 73	41 ± 81	11 ± 76	−7 ± 71
NPL	−6 ± 31	29 ± 59	0 ± 31	−8 ± 32	1 ± 35	30 ± 50	0 ± 42	−18 ± 32
NPLI	9 ± 21	44 ± 54	15 ± 20	7 ± 23	16 ± 27	45 ± 45	15 ± 35	−3 ± 22
NRC	−35 ± 42	0 ± 65	−29 ± 42	−37 ± 43	−28 ± 46	1 ± 58	−29 ± 51	−47 ± 43
PTB	−12 ± 27	23 ± 57	−6 ± 27	−14 ± 29	−5 ± 32	24 ± 48	−6 ± 40	−24 ± 28
SP	−12 ± 52	23 ± 72	−6 ± 51	−14 ± 52	−5 ± 54	24 ± 65	−6 ± 59	−24 ± 52
UME	−21 ± 52	14 ± 72	−15 ± 52	−23 ± 53	−14 ± 55	15 ± 65	−15 ± 59	−33 ± 52
VNIIM	−14 ± 26	21 ± 56	−8 ± 26	−16 ± 28	−7 ± 31	22 ± 47	−8 ± 39	−26 ± 27
VSL	−12 ± 44	23 ± 67	−6 ± 44	−14 ± 45	−5 ± 47	24 ± 59	−6 ± 53	−24 ± 45

	NIST	NPL	NPLI	NRC	PTB	SP	UME	VNIIM	VSL
NMIJ	−5 ± 71	6 ± 31	−9 ± 21	35 ± 42	12 ± 27	12 ± 52	21 ± 52	14 ± 26	12 ± 44
CEM	−40 ± 86	−29 ± 59	−44 ± 54	0 ± 65	−23 ± 57	−23 ± 72	−14 ± 72	−21 ± 56	−23 ± 67
NMIA	−11 ± 70	−0 ± 31	−15 ± 20	29 ± 42	6 ± 27	6 ± 51	15 ± 52	8 ± 26	6 ± 44
IEN	−3 ± 71	8 ± 32	−7 ± 23	37 ± 43	14 ± 29	14 ± 52	23 ± 53	16 ± 28	14 ± 45
KRISS	−12 ± 73	−1 ± 35	−16 ± 27	28 ± 46	5 ± 32	5 ± 54	14 ± 55	7 ± 31	5 ± 47
LCIE	−41 ± 81	−30 ± 50	−45 ± 45	−1 ± 58	−24 ± 48	−24 ± 65	−15 ± 65	−22 ± 47	−24 ± 59
METAS	−11 ± 76	−0 ± 42	−15 ± 35	29 ± 51	6 ± 40	6 ± 59	15 ± 59	8 ± 39	6 ± 53
NIM	7 ± 71	18 ± 32	3 ± 22	47 ± 43	24 ± 28	24 ± 52	33 ± 52	26 ± 27	24 ± 45
NIST		11 ± 75	−4 ± 71	40 ± 80	17 ± 73	17 ± 85	26 ± 85	19 ± 73	17 ± 81
NPL	−11 ± 75		−15 ± 32	29 ± 49	6 ± 37	6 ± 57	15 ± 57	8 ± 35	6 ± 50
NPLI	4 ± 71	15 ± 32		44 ± 43	21 ± 28	21 ± 52	30 ± 52	23 ± 27	21 ± 45
NRC	−40 ± 80	−29 ± 49	−44 ± 43		−23 ± 47	−23 ± 64	−14 ± 64	−21 ± 46	−23 ± 58
PTB	−17 ± 73	−6 ± 37	−21 ± 28	23 ± 47		0 ± 55	9 ± 55	2 ± 32	0 ± 48
SP	−17 ± 85	−6 ± 57	−21 ± 52	23 ± 64	0 ± 55		9 ± 70	2 ± 54	0 ± 65
UME	−26 ± 85	−15 ± 57	−30 ± 52	14 ± 64	−9 ± 55	−9 ± 70		−7 ± 55	−9 ± 65
VNIIM	−19 ± 73	−8 ± 35	−23 ± 27	21 ± 46	−2 ± 32	−2 ± 54	7 ± 55		−2 ± 47
VSL	−17 ± 81	−6 ± 50	−21 ± 45	23 ± 58	0 ± 48	0 ± 65	9 ± 65	2 ± 47	

Nominal Ratio: 5/11 at 1 kHz, In-Phase Voltage Ratio (KCRV ± 2σ) is (-2.2 ± 5.4) x 10⁻⁹ of input

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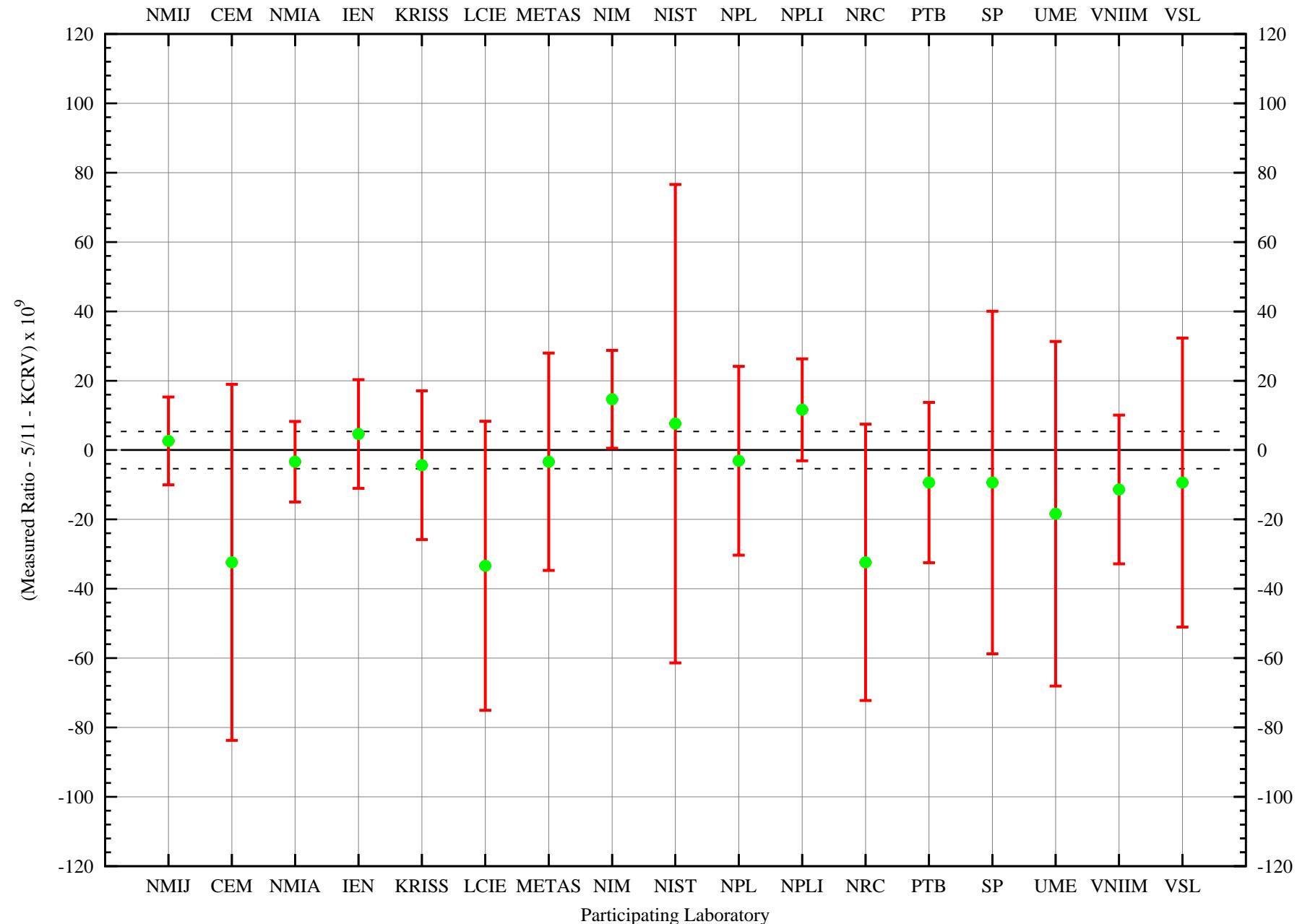
Table 78: Degree of equivalence to the KCRV for the Nominal Ratio 5/11 at 1 kHz, Quadrature Voltage Ratio (nV/V)

NMIJ	CEM	NMIA	IEN	KRISS	LCIE	METAS	NIM
−16 ± 21	38 ± 48	0.9 ± 2.5	2 ± 13	−34 ± 24	−4087 ± 690	9 ± 137	−30 ± 20

NIST	NPL	NPLI	NRC	PTB	SP	UME	VNIIM	VSL
19 ± 130	−26 ± 25	−9485 ± 500	−77 ± 38	−31 ± 20	−10 ± 71	−22 ± 59	19 ± 28	−505 ± 230

Table 79: Laboratory - Laboratory degree of equivalence for the Nominal Ratio 5/11 at 1 kHz, Quadrature Voltage Ratio (nV/V)

	NMIJ	CEM	NMIA	IEN	KRISS	LCIE	METAS	NIM
NMIJ		−54 ± 53	−17 ± 22	−18 ± 26	18 ± 33	4071 ± 690	−25 ± 139	14 ± 30
CEM	54 ± 53		37 ± 48	36 ± 50	72 ± 54	4125 ± 692	29 ± 145	68 ± 52
NMIA	17 ± 22	−37 ± 48		−1 ± 15	35 ± 25	4088 ± 690	−8 ± 137	31 ± 21
IEN	18 ± 26	−36 ± 50	1 ± 15		36 ± 28	4089 ± 690	−7 ± 138	32 ± 25
KRISS	−18 ± 33	−72 ± 54	−35 ± 25	−36 ± 28		4053 ± 690	−43 ± 140	−4 ± 32
LCIE	−4071 ± 690	−4125 ± 692	−4088 ± 690	−4089 ± 690	−4053 ± 690		−4096 ± 704	−4057 ± 690
METAS	25 ± 139	−29 ± 145	8 ± 137	7 ± 138	43 ± 140	4096 ± 704		39 ± 139
NIM	−14 ± 30	−68 ± 52	−31 ± 21	−32 ± 25	4 ± 32	4057 ± 690	−39 ± 139	
NIST	35 ± 132	−19 ± 139	18 ± 130	17 ± 131	53 ± 132	4106 ± 702	10 ± 189	49 ± 132
NPL	−10 ± 33	−64 ± 54	−27 ± 26	−28 ± 29	8 ± 35	4061 ± 690	−35 ± 140	4 ± 33
NPLI	−9469 ± 500	−9523 ± 502	−9486 ± 500	−9487 ± 500	−9451 ± 501	−5398 ± 852	−9494 ± 519	−9455 ± 500
NRC	−61 ± 44	−115 ± 61	−78 ± 39	−79 ± 41	−43 ± 46	4010 ± 691	−86 ± 143	−47 ± 44
PTB	−15 ± 30	−69 ± 52	−32 ± 21	−33 ± 25	3 ± 32	4056 ± 690	−40 ± 139	−1 ± 29
SP	6 ± 74	−48 ± 86	−11 ± 71	−12 ± 73	24 ± 75	4077 ± 694	−19 ± 155	20 ± 74
UME	−6 ± 63	−60 ± 76	−23 ± 60	−24 ± 61	12 ± 64	4065 ± 693	−31 ± 150	8 ± 63
VNIIM	35 ± 36	−19 ± 56	18 ± 29	17 ± 32	53 ± 38	4106 ± 691	10 ± 140	49 ± 35
VSL	−489 ± 231	−543 ± 235	−506 ± 230	−507 ± 230	−471 ± 231	3582 ± 727	−514 ± 268	−475 ± 231

	NIST	NPL	NPLI	NRC	PTB	SP	UME	VNIIM	VSL
NMIJ	−35 ± 132	10 ± 33	9469 ± 500	61 ± 44	15 ± 30	−6 ± 74	6 ± 63	−35 ± 36	489 ± 231
CEM	19 ± 139	64 ± 54	9523 ± 502	115 ± 61	69 ± 52	48 ± 86	60 ± 76	19 ± 56	543 ± 235
NMIA	−18 ± 130	27 ± 26	9486 ± 500	78 ± 39	32 ± 21	11 ± 71	23 ± 60	−18 ± 29	506 ± 230
IEN	−17 ± 131	28 ± 29	9487 ± 500	79 ± 41	33 ± 25	12 ± 73	24 ± 61	−17 ± 32	507 ± 230
KRISS	−53 ± 132	−8 ± 35	9451 ± 501	43 ± 46	−3 ± 32	−24 ± 75	−12 ± 64	−53 ± 38	471 ± 231
LCIE	−4106 ± 702	−4061 ± 690	5398 ± 852	−4010 ± 691	−4056 ± 690	−4077 ± 694	−4065 ± 693	−4106 ± 691	−3582 ± 727
METAS	−10 ± 189	35 ± 140	9494 ± 519	86 ± 143	40 ± 139	19 ± 155	31 ± 150	−10 ± 140	514 ± 268
NIM	−49 ± 132	−4 ± 33	9455 ± 500	47 ± 44	1 ± 29	−20 ± 74	−8 ± 63	−49 ± 35	475 ± 231
NIST		45 ± 133	9504 ± 517	96 ± 136	50 ± 132	29 ± 148	41 ± 143	0 ± 133	524 ± 264
NPL	−45 ± 133		9459 ± 501	51 ± 46	5 ± 33	−16 ± 76	−4 ± 65	−45 ± 38	479 ± 231
NPLI	−9504 ± 517	−9459 ± 501		−9408 ± 502	−9454 ± 500	−9475 ± 505	−9463 ± 504	−9504 ± 501	−8980 ± 550
NRC	−96 ± 136	−51 ± 46	9408 ± 502		−46 ± 44	−67 ± 81	−55 ± 71	−96 ± 48	428 ± 233
PTB	−50 ± 132	−5 ± 33	9454 ± 500	46 ± 44		−21 ± 74	−9 ± 63	−50 ± 35	474 ± 231
SP	−29 ± 148	16 ± 76	9475 ± 505	67 ± 81	21 ± 74		12 ± 93	−29 ± 77	495 ± 241
UME	−41 ± 143	4 ± 65	9463 ± 504	55 ± 71	9 ± 63	−12 ± 93		−41 ± 66	483 ± 238
VNIIM	0 ± 133	45 ± 38	9504 ± 501	96 ± 48	50 ± 35	29 ± 77	41 ± 66		524 ± 232
VSL	−524 ± 264	−479 ± 231	8980 ± 550	−428 ± 233	−474 ± 231	−495 ± 241	−483 ± 238	−524 ± 232	

Nominal Ratio: 5/11 at 1 kHz, Quadrature Voltage Ratio (KCRV ± 2σ) is (-124.9 ± 4.6) x 10⁻⁹ of input

(Measured Ratio - KCRV) x 10⁹

Participating Laboratory

-4087 ± 690

-9485 ± 500

-505 ± 230

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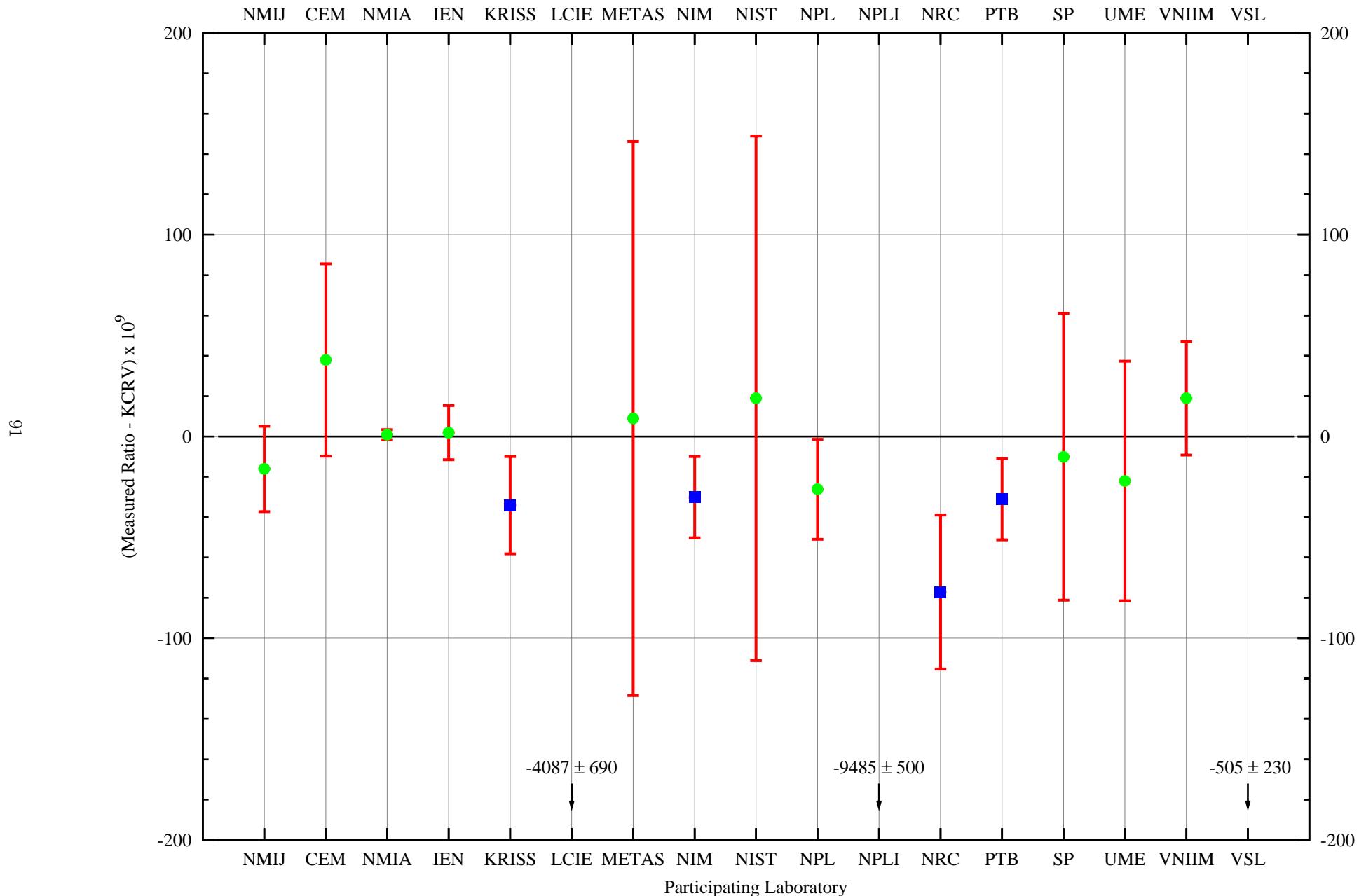
Table 80: Degree of equivalence to the KCRV for the Nominal Ratio 4/11 at 1 kHz, In-Phase Voltage Ratio (nV/V)

NMIJ	CEM	NMIA	IEN	KRISS	LCIE	METAS	NIM
2 ± 12	−31 ± 51	−2.5 ±11.6	3 ± 16	−4 ± 21	−132 ± 41	−5 ± 33	16 ± 14

NIST	NPL	NPLI	NRC	PTB	SP	UME	VNIIM	VSL
7 ± 69	−4 ± 27	7 ± 15	−29 ± 40	−12 ± 23	−13 ± 49	−18 ± 50	−14 ± 21	−15 ± 37

Table 81: Laboratory - Laboratory degree of equivalence for the Nominal Ratio 4/11 at 1 kHz, In-Phase Voltage Ratio (nV/V)

	NMIJ	CEM	NMIA	IEN	KRISS	LCIE	METAS	NIM
NMIJ		33 ± 53	5 ± 19	−1 ± 21	6 ± 26	134 ± 43	7 ± 36	−14 ± 20
CEM	−33 ± 53		−28 ± 53	−34 ± 54	−27 ± 56	101 ± 66	−26 ± 61	−47 ± 54
NMIA	−5 ± 19	28 ± 53		−6 ± 21	1 ± 26	129 ± 43	2 ± 35	−19 ± 20
IEN	1 ± 21	34 ± 54	6 ± 21		7 ± 28	135 ± 44	8 ± 37	−13 ± 22
KRISS	−6 ± 26	27 ± 56	−1 ± 26	−7 ± 28		128 ± 47	1 ± 40	−20 ± 27
LCIE	−134 ± 43	−101 ± 66	−129 ± 43	−135 ± 44	−128 ± 47		−127 ± 53	−148 ± 44
METAS	−7 ± 36	26 ± 61	−2 ± 35	−8 ± 37	−1 ± 40	127 ± 53		−21 ± 36
NIM	14 ± 20	47 ± 54	19 ± 20	13 ± 22	20 ± 27	148 ± 44	21 ± 36	
NIST	5 ± 70	38 ± 86	10 ± 70	4 ± 71	11 ± 73	139 ± 80	12 ± 77	−9 ± 71
NPL	−6 ± 31	27 ± 59	−1 ± 31	−7 ± 32	−0 ± 35	128 ± 50	1 ± 43	−20 ± 32
NPLI	5 ± 21	38 ± 54	10 ± 20	4 ± 23	11 ± 27	139 ± 44	12 ± 37	−9 ± 22
NRC	−31 ± 42	2 ± 65	−26 ± 42	−32 ± 43	−25 ± 46	103 ± 57	−24 ± 52	−45 ± 43
PTB	−14 ± 27	19 ± 57	−9 ± 27	−15 ± 29	−8 ± 32	120 ± 47	−7 ± 41	−28 ± 28
SP	−15 ± 51	18 ± 72	−10 ± 51	−16 ± 52	−9 ± 54	119 ± 64	−8 ± 60	−29 ± 52
UME	−20 ± 52	13 ± 72	−15 ± 52	−21 ± 53	−14 ± 55	114 ± 65	−13 ± 60	−34 ± 52
VNIIM	−16 ± 26	17 ± 56	−11 ± 26	−17 ± 28	−10 ± 31	118 ± 47	−9 ± 40	−30 ± 27
VSL	−17 ± 40	16 ± 64	−12 ± 39	−18 ± 41	−11 ± 43	117 ± 55	−10 ± 50	−31 ± 40

	NIST	NPL	NPLI	NRC	PTB	SP	UME	VNIIM	VSL
NMIJ	−5 ± 70	6 ± 31	−5 ± 21	31 ± 42	14 ± 27	15 ± 51	20 ± 52	16 ± 26	17 ± 40
CEM	−38 ± 86	−27 ± 59	−38 ± 54	−2 ± 65	−19 ± 57	−18 ± 72	−13 ± 72	−17 ± 56	−16 ± 64
NMIA	−10 ± 70	1 ± 31	−10 ± 20	26 ± 42	9 ± 27	10 ± 51	15 ± 52	11 ± 26	12 ± 39
IEN	−4 ± 71	7 ± 32	−4 ± 23	32 ± 43	15 ± 29	16 ± 52	21 ± 53	17 ± 28	18 ± 41
KRISS	−11 ± 73	0 ± 35	−11 ± 27	25 ± 46	8 ± 32	9 ± 54	14 ± 55	10 ± 31	11 ± 43
LCIE	−139 ± 80	−128 ± 50	−139 ± 44	−103 ± 57	−120 ± 47	−119 ± 64	−114 ± 65	−118 ± 47	−117 ± 55
METAS	−12 ± 77	−1 ± 43	−12 ± 37	24 ± 52	7 ± 41	8 ± 60	13 ± 60	9 ± 40	10 ± 50
NIM	9 ± 71	20 ± 32	9 ± 22	45 ± 43	28 ± 28	29 ± 52	34 ± 52	30 ± 27	31 ± 40
NIST		11 ± 75	0 ± 71	36 ± 80	19 ± 73	20 ± 85	25 ± 85	21 ± 73	22 ± 79
NPL	−11 ± 75		−11 ± 32	25 ± 49	8 ± 37	9 ± 57	14 ± 57	10 ± 35	11 ± 46
NPLI	0 ± 71	11 ± 32		36 ± 43	19 ± 28	20 ± 52	25 ± 52	21 ± 27	22 ± 40
NRC	−36 ± 80	−25 ± 49	−36 ± 43		−17 ± 47	−16 ± 64	−11 ± 64	−15 ± 46	−14 ± 55
PTB	−19 ± 73	−8 ± 37	−19 ± 28	17 ± 47		1 ± 55	6 ± 55	2 ± 32	3 ± 44
SP	−20 ± 85	−9 ± 57	−20 ± 52	16 ± 64	−1 ± 55		5 ± 70	1 ± 54	2 ± 62
UME	−25 ± 85	−14 ± 57	−25 ± 52	11 ± 64	−6 ± 55	−5 ± 70		−4 ± 55	−3 ± 62
VNIIM	−21 ± 73	−10 ± 35	−21 ± 27	15 ± 46	−2 ± 32	−1 ± 54	4 ± 55		1 ± 43
VSL	−22 ± 79	−11 ± 46	−22 ± 40	14 ± 55	−3 ± 44	−2 ± 62	3 ± 62	−1 ± 43	

Nominal Ratio: 4/11 at 1 kHz, In-Phase Voltage Ratio (KCRV $\pm$ 2σ) is (-31.1 $\pm$ 5.4) x 10^{-9} of input
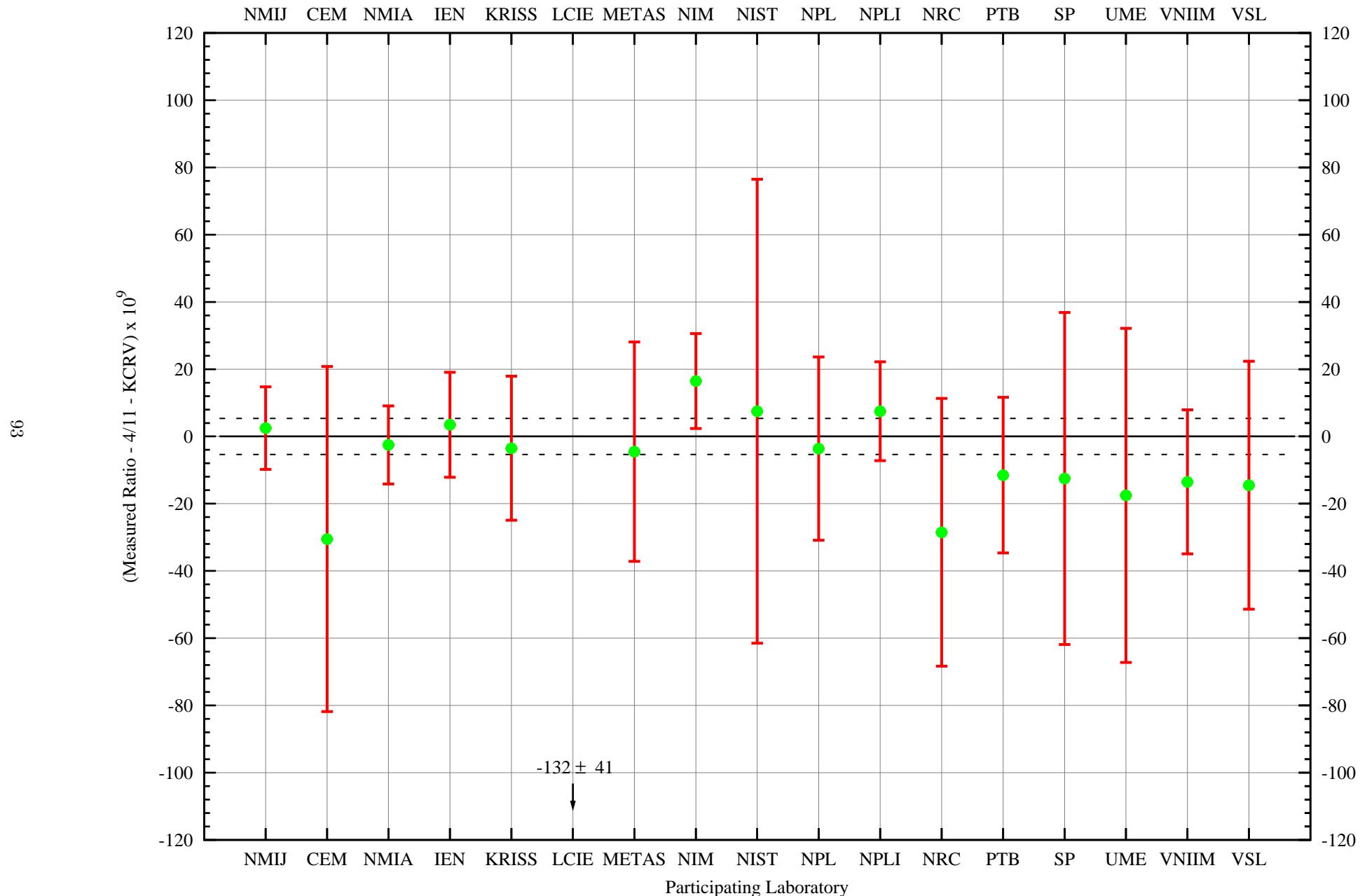
Table 82: Degree of equivalence to the KCRV for the Nominal Ratio 4/11 at 1 kHz, Quadrature Voltage Ratio (nV/V)

NMIJ	CEM	NMIA	IEN	KRISS	LCIE	METAS	NIM
-8 ± 18	41 ± 50	2.8 ± 3.0	7 ± 13	-19 ± 24	1000 ± 690	14 ± 146	-7 ± 20

NIST	NPL	NPLI	NRC	PTB	SP	UME	VNIIM	VSL
17 ± 130	-22 ± 25	-8323 ± 500	-65 ± 38	-26 ± 20	-7 ± 71	-13 ± 59	16 ± 28	-463 ± 210

Table 83: Laboratory - Laboratory degree of equivalence for the Nominal Ratio 4/11 at 1 kHz, Quadrature Voltage Ratio (nV/V)

	NMIJ	CEM	NMIA	IEN	KRISS	LCIE	METAS	NIM
NMIJ		-49 ± 54	-11 ± 19	-15 ± 23	11 ± 31	-1008 ± 690	-22 ± 147	-1 ± 28
CEM	49 ± 54		38 ± 51	34 ± 52	60 ± 56	-959 ± 692	27 ± 154	48 ± 54
NMIA	11 ± 19	-38 ± 51		-4 ± 15	22 ± 25	-997 ± 690	-11 ± 146	10 ± 21
IEN	15 ± 23	-34 ± 52	4 ± 15		26 ± 28	-993 ± 690	-7 ± 146	14 ± 25
KRISS	-11 ± 31	-60 ± 56	-22 ± 25	-26 ± 28		-1019 ± 690	-33 ± 148	-12 ± 32
LCIE	1008 ± 690	959 ± 692	997 ± 690	993 ± 690	1019 ± 690		986 ± 705	1007 ± 690
METAS	22 ± 147	-27 ± 154	11 ± 146	7 ± 146	33 ± 148	-986 ± 705		21 ± 147
NIM	1 ± 28	-48 ± 54	-10 ± 21	-14 ± 25	12 ± 32	-1007 ± 690	-21 ± 147	
NIST	25 ± 131	-24 ± 139	14 ± 130	10 ± 131	36 ± 132	-983 ± 702	3 ± 195	24 ± 132
NPL	-13 ± 31	-62 ± 56	-24 ± 26	-28 ± 29	-2 ± 35	-1021 ± 690	-35 ± 148	-14 ± 33
NPLI	-8315 ± 500	-8364 ± 503	-8326 ± 500	-8330 ± 500	-8304 ± 501	-9323 ± 852	-8337 ± 521	-8316 ± 500
NRC	-57 ± 43	-106 ± 63	-68 ± 39	-72 ± 41	-46 ± 46	-1065 ± 691	-79 ± 151	-58 ± 44
PTB	-18 ± 28	-67 ± 54	-29 ± 21	-33 ± 25	-7 ± 32	-1026 ± 690	-40 ± 147	-19 ± 29
SP	1 ± 74	-48 ± 87	-10 ± 71	-14 ± 73	12 ± 75	-1007 ± 694	-21 ± 162	0 ± 74
UME	-5 ± 62	-54 ± 78	-16 ± 60	-20 ± 61	6 ± 64	-1013 ± 693	-27 ± 158	-6 ± 63
VNIIM	24 ± 34	-25 ± 58	13 ± 29	9 ± 32	35 ± 38	-984 ± 691	2 ± 149	23 ± 35
VSL	-455 ± 211	-504 ± 216	-466 ± 210	-470 ± 211	-444 ± 211	-1463 ± 721	-477 ± 256	-456 ± 211

	NIST	NPL	NPLI	NRC	PTB	SP	UME	VNIIM	VSL
NMIJ	-25 ± 131	13 ± 31	8315 ± 500	57 ± 43	18 ± 28	-1 ± 74	5 ± 62	-24 ± 34	455 ± 211
CEM	24 ± 139	62 ± 56	8364 ± 503	106 ± 63	67 ± 54	48 ± 87	54 ± 78	25 ± 58	504 ± 216
NMIA	-14 ± 130	24 ± 26	8326 ± 500	68 ± 39	29 ± 21	10 ± 71	16 ± 60	-13 ± 29	466 ± 210
IEN	-10 ± 131	28 ± 29	8330 ± 500	72 ± 41	33 ± 25	14 ± 73	20 ± 61	-9 ± 32	470 ± 211
KRISS	-36 ± 132	2 ± 35	8304 ± 501	46 ± 46	7 ± 32	-12 ± 75	-6 ± 64	-35 ± 38	444 ± 211
LCIE	983 ± 702	1021 ± 690	9323 ± 852	1065 ± 691	1026 ± 690	1007 ± 694	1013 ± 693	984 ± 691	1463 ± 721
METAS	-3 ± 195	35 ± 148	8337 ± 521	79 ± 151	40 ± 147	21 ± 162	27 ± 158	-2 ± 149	477 ± 256
NIM	-24 ± 132	14 ± 33	8316 ± 500	58 ± 44	19 ± 29	0 ± 74	6 ± 63	-23 ± 35	456 ± 211
NIST		38 ± 133	8340 ± 517	82 ± 136	43 ± 132	24 ± 148	30 ± 143	1 ± 133	480 ± 247
NPL	-38 ± 133		8302 ± 501	44 ± 46	5 ± 33	-14 ± 76	-8 ± 65	-37 ± 38	442 ± 212
NPLI	-8340 ± 517	-8302 ± 501		-8258 ± 502	-8297 ± 500	-8316 ± 505	-8310 ± 504	-8339 ± 501	-7860 ± 542
NRC	-82 ± 136	-44 ± 46	8258 ± 502		-39 ± 44	-58 ± 81	-52 ± 71	-81 ± 48	398 ± 214
PTB	-43 ± 132	-5 ± 33	8297 ± 500	39 ± 44		-19 ± 74	-13 ± 63	-42 ± 35	437 ± 211
SP	-24 ± 148	14 ± 76	8316 ± 505	58 ± 81	19 ± 74		6 ± 93	-23 ± 77	456 ± 222
UME	-30 ± 143	8 ± 65	8310 ± 504	52 ± 71	13 ± 63	-6 ± 93		-29 ± 66	450 ± 218
VNIIM	-1 ± 133	37 ± 38	8339 ± 501	81 ± 48	42 ± 35	23 ± 77	29 ± 66		479 ± 212
VSL	-480 ± 247	-442 ± 212	7860 ± 542	-398 ± 214	-437 ± 211	-456 ± 222	-450 ± 218	-479 ± 212	

Nominal Ratio: 4/11 at 1 kHz, Quadrature Voltage Ratio (KCRV $\pm$ 2σ) is (-46.8 $\pm$ 4.3) x 10^{-9} of input
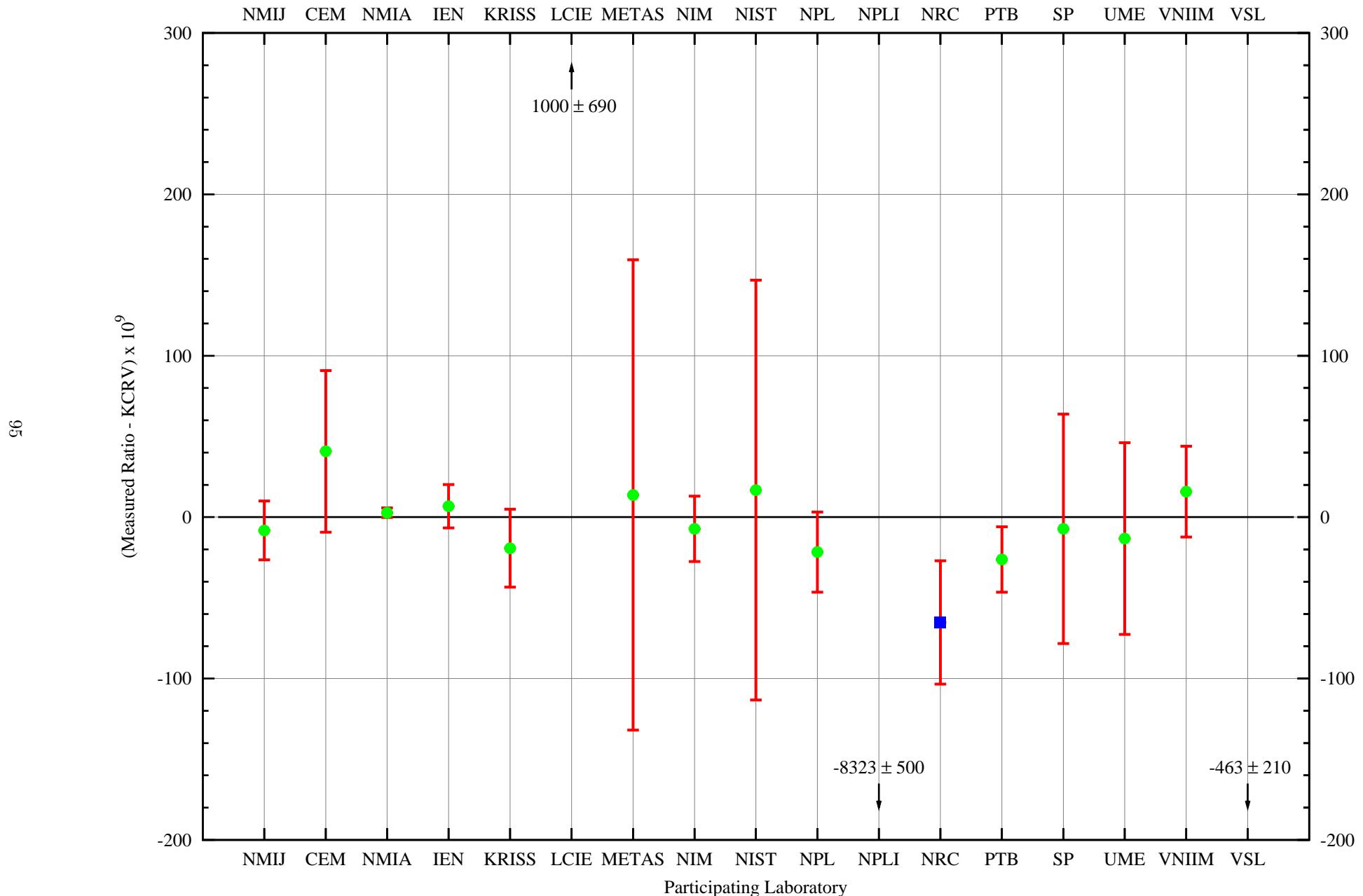
Table 84: Degree of equivalence to the KCRV for the Nominal Ratio 3/11 at 1 kHz, In-Phase Voltage Ratio (nV/V)

NMIJ	CEM	NMIA	IEN	KRISS	LCIE	METAS	NIM
3 ± 12	−29 ± 51	−4.2 ±11.7	6 ± 16	−3 ± 21	−238 ± 39	−5 ± 31	14 ± 12

NIST	NPL	NPLI	NRC	PTB	SP	UME	VNIIM	VSL
6 ± 67	−4 ± 27	7 ± 15	−25 ± 40	−13 ± 23	−10 ± 49	−15 ± 50	−13 ± 21	−12 ± 32

Table 85: Laboratory - Laboratory degree of equivalence for the Nominal Ratio 3/11 at 1 kHz, In-Phase Voltage Ratio (nV/V)

	NMIJ	CEM	NMIA	IEN	KRISS	LCIE	METAS	NIM
NMIJ		32 ± 53	7 ± 18	−3 ± 21	6 ± 26	241 ± 41	8 ± 34	−11 ± 19
CEM	−32 ± 53		−25 ± 53	−35 ± 54	−26 ± 56	209 ± 65	−24 ± 60	−43 ± 53
NMIA	−7 ± 18	25 ± 53		−10 ± 21	−1 ± 26	234 ± 41	1 ± 34	−18 ± 19
IEN	3 ± 21	35 ± 54	10 ± 21		9 ± 28	244 ± 42	11 ± 35	−8 ± 21
KRISS	−6 ± 26	26 ± 56	1 ± 26	−9 ± 28		235 ± 45	2 ± 38	−17 ± 26
LCIE	−241 ± 41	−209 ± 65	−234 ± 41	−244 ± 42	−235 ± 45		−233 ± 50	−252 ± 41
METAS	−8 ± 34	24 ± 60	−1 ± 34	−11 ± 35	−2 ± 38	233 ± 50		−19 ± 34
NIM	11 ± 19	43 ± 53	18 ± 19	8 ± 21	17 ± 26	252 ± 41	19 ± 34	
NIST	3 ± 69	35 ± 85	10 ± 68	0 ± 69	9 ± 71	244 ± 78	11 ± 74	−8 ± 69
NPL	−7 ± 31	25 ± 59	−0 ± 31	−10 ± 32	−1 ± 35	234 ± 48	1 ± 42	−18 ± 31
NPLI	4 ± 21	36 ± 54	11 ± 20	1 ± 23	10 ± 27	245 ± 42	12 ± 35	−7 ± 21
NRC	−28 ± 42	4 ± 65	−21 ± 42	−31 ± 43	−22 ± 46	213 ± 56	−20 ± 51	−39 ± 42
PTB	−16 ± 27	16 ± 57	−9 ± 27	−19 ± 29	−10 ± 32	225 ± 46	−8 ± 39	−27 ± 27
SP	−13 ± 51	19 ± 72	−6 ± 51	−16 ± 52	−7 ± 54	228 ± 63	−5 ± 59	−24 ± 51
UME	−18 ± 52	14 ± 72	−11 ± 52	−21 ± 53	−12 ± 55	223 ± 63	−10 ± 59	−29 ± 52
VNIIM	−16 ± 26	16 ± 56	−9 ± 26	−19 ± 28	−10 ± 31	225 ± 45	−8 ± 38	−27 ± 26
VSL	−15 ± 35	17 ± 61	−8 ± 35	−18 ± 37	−9 ± 39	226 ± 51	−7 ± 45	−26 ± 35

	NIST	NPL	NPLI	NRC	PTB	SP	UME	VNIIM	VSL
NMIJ	−3 ± 69	7 ± 31	−4 ± 21	28 ± 42	16 ± 27	13 ± 51	18 ± 52	16 ± 26	15 ± 35
CEM	−35 ± 85	−25 ± 59	−36 ± 54	−4 ± 65	−16 ± 57	−19 ± 72	−14 ± 72	−16 ± 56	−17 ± 61
NMIA	−10 ± 68	0 ± 31	−11 ± 20	21 ± 42	9 ± 27	6 ± 51	11 ± 52	9 ± 26	8 ± 35
IEN	0 ± 69	10 ± 32	−1 ± 23	31 ± 43	19 ± 29	16 ± 52	21 ± 53	19 ± 28	18 ± 37
KRISS	−9 ± 71	1 ± 35	−10 ± 27	22 ± 46	10 ± 32	7 ± 54	12 ± 55	10 ± 31	9 ± 39
LCIE	−244 ± 78	−234 ± 48	−245 ± 42	−213 ± 56	−225 ± 46	−228 ± 63	−223 ± 63	−225 ± 45	−226 ± 51
METAS	−11 ± 74	−1 ± 42	−12 ± 35	20 ± 51	8 ± 39	5 ± 59	10 ± 59	8 ± 38	7 ± 45
NIM	8 ± 69	18 ± 31	7 ± 21	39 ± 42	27 ± 27	24 ± 51	29 ± 52	27 ± 26	26 ± 35
NIST		10 ± 73	−1 ± 69	31 ± 78	19 ± 71	16 ± 84	21 ± 84	19 ± 71	18 ± 75
NPL	−10 ± 73		−11 ± 32	21 ± 49	9 ± 37	6 ± 57	11 ± 57	9 ± 35	8 ± 43
NPLI	1 ± 69	11 ± 32		32 ± 43	20 ± 28	17 ± 52	22 ± 52	20 ± 27	19 ± 36
NRC	−31 ± 78	−21 ± 49	−32 ± 43		−12 ± 47	−15 ± 64	−10 ± 64	−12 ± 46	−13 ± 52
PTB	−19 ± 71	−9 ± 37	−20 ± 28	12 ± 47		−3 ± 55	2 ± 55	0 ± 32	−1 ± 40
SP	−16 ± 84	−6 ± 57	−17 ± 52	15 ± 64	3 ± 55		5 ± 70	3 ± 54	2 ± 59
UME	−21 ± 84	−11 ± 57	−22 ± 52	10 ± 64	−2 ± 55	−5 ± 70		−2 ± 55	−3 ± 60
VNIIM	−19 ± 71	−9 ± 35	−20 ± 27	12 ± 46	0 ± 32	−3 ± 54	2 ± 55		−1 ± 39
VSL	−18 ± 75	−8 ± 43	−19 ± 36	13 ± 52	1 ± 40	−2 ± 59	3 ± 60	1 ± 39	

Nominal Ratio: 3/11 at 1 kHz, In-Phase Voltage Ratio (KCRV ± 2σ) is (-24.5 ± 5.3) x 10⁻⁹ of input
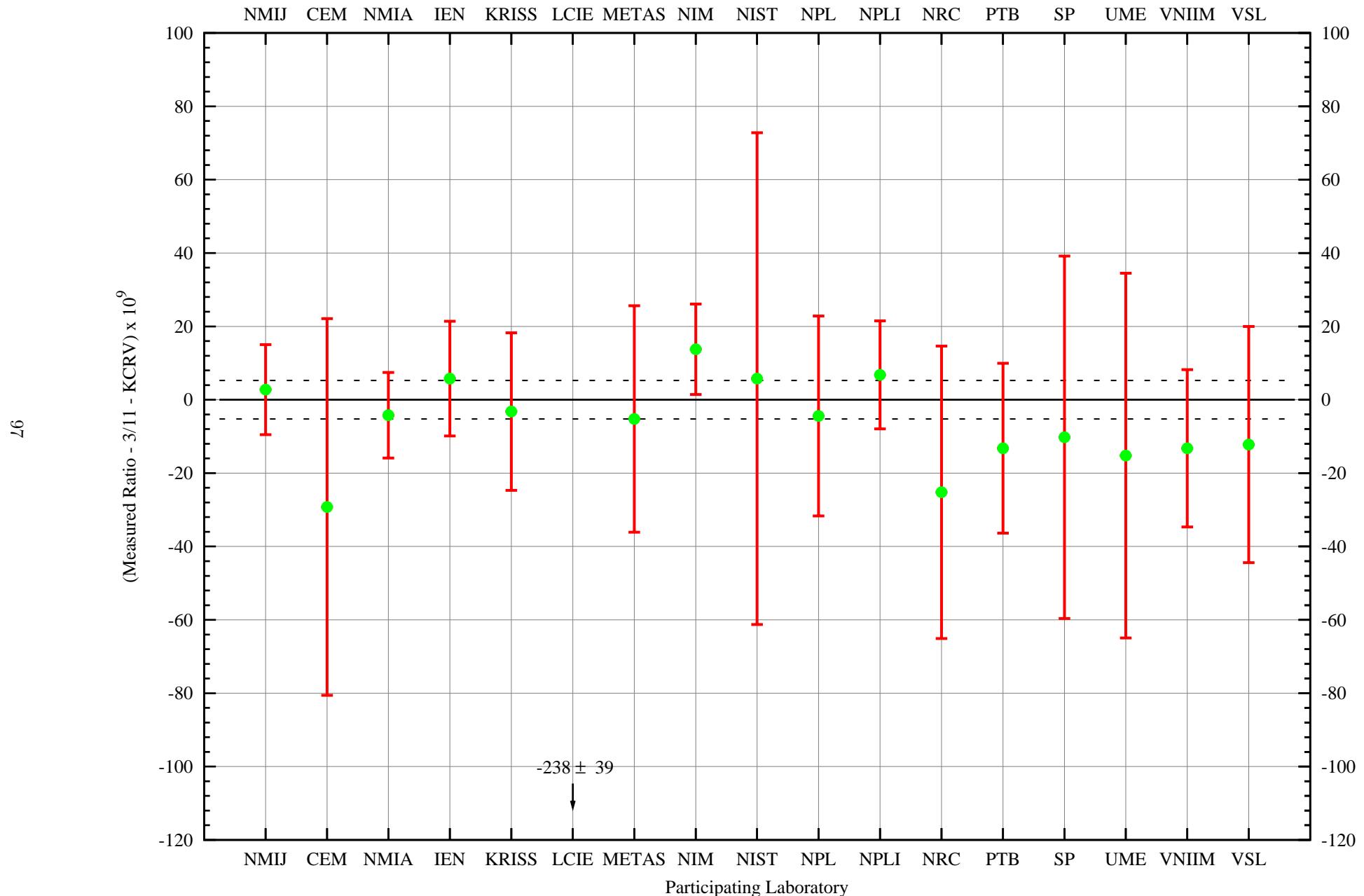
Table 86: Degree of equivalence to the KCRV for the Nominal Ratio 3/11 at 1 kHz, Quadrature Voltage Ratio (nV/V)

NMIJ	CEM	NMIA	IEN	KRISS	LCIE	METAS	NIM
−5 ± 15	37 ± 50	3.6 ± 3.2	6 ± 13	−6 ± 24	5338 ± 690	13 ± 138	−8 ± 12

NIST	NPL	NPLI	NRC	PTB	SP	UME	VNIIM	VSL
14 ± 130	−17 ± 25	−6918 ± 500	−51 ± 38	−20 ± 20	−24 ± 71	−5 ± 59	14 ± 28	−358 ± 190

Table 87: Laboratory - Laboratory degree of equivalence for the Nominal Ratio 3/11 at 1 kHz, Quadrature Voltage Ratio (nV/V)

	NMIJ	CEM	NMIA	IEN	KRISS	LCIE	METAS	NIM
NMIJ		−42 ± 53	−9 ± 17	−11 ± 21	1 ± 29	−5343 ± 690	−18 ± 139	3 ± 21
CEM	42 ± 53		33 ± 51	31 ± 52	43 ± 56	−5301 ± 692	24 ± 147	45 ± 52
NMIA	9 ± 17	−33 ± 51		−2 ± 15	10 ± 25	−5334 ± 690	−9 ± 138	12 ± 14
IEN	11 ± 21	−31 ± 52	2 ± 15		12 ± 28	−5332 ± 690	−7 ± 139	14 ± 19
KRISS	−1 ± 29	−43 ± 56	−10 ± 25	−12 ± 28		−5344 ± 690	−19 ± 140	2 ± 28
LCIE	5343 ± 690	5301 ± 692	5334 ± 690	5332 ± 690	5344 ± 690		5325 ± 704	5346 ± 690
METAS	18 ± 139	−24 ± 147	9 ± 138	7 ± 139	19 ± 140	−5325 ± 704		21 ± 139
NIM	−3 ± 21	−45 ± 52	−12 ± 14	−14 ± 19	−2 ± 28	−5346 ± 690	−21 ± 139	
NIST	19 ± 131	−23 ± 139	10 ± 130	8 ± 131	20 ± 132	−5324 ± 702	1 ± 190	22 ± 131
NPL	−11 ± 30	−53 ± 56	−20 ± 26	−22 ± 29	−10 ± 35	−5354 ± 690	−29 ± 140	−8 ± 28
NPLI	−6913 ± 500	−6955 ± 503	−6922 ± 500	−6924 ± 500	−6912 ± 501	−12256 ± 852	−6931 ± 519	−6910 ± 500
NRC	−46 ± 42	−88 ± 63	−55 ± 39	−57 ± 41	−45 ± 46	−5389 ± 691	−64 ± 143	−43 ± 41
PTB	−15 ± 26	−57 ± 54	−24 ± 21	−26 ± 25	−14 ± 32	−5358 ± 690	−33 ± 140	−12 ± 24
SP	−19 ± 73	−61 ± 87	−28 ± 71	−30 ± 73	−18 ± 75	−5362 ± 694	−37 ± 155	−16 ± 72
UME	0 ± 62	−42 ± 78	−9 ± 60	−11 ± 61	1 ± 64	−5343 ± 693	−18 ± 150	3 ± 61
VNIIM	19 ± 33	−23 ± 58	10 ± 29	8 ± 32	20 ± 38	−5324 ± 691	1 ± 141	22 ± 31
VSL	−353 ± 191	−395 ± 197	−362 ± 190	−364 ± 191	−352 ± 192	−5696 ± 716	−371 ± 235	−350 ± 191

	NIST	NPL	NPLI	NRC	PTB	SP	UME	VNIIM	VSL
NMIJ	−19 ± 131	11 ± 30	6913 ± 500	46 ± 42	15 ± 26	19 ± 73	0 ± 62	−19 ± 33	353 ± 191
CEM	23 ± 139	53 ± 56	6955 ± 503	88 ± 63	57 ± 54	61 ± 87	42 ± 78	23 ± 58	395 ± 197
NMIA	−10 ± 130	20 ± 26	6922 ± 500	55 ± 39	24 ± 21	28 ± 71	9 ± 60	−10 ± 29	362 ± 190
IEN	−8 ± 131	22 ± 29	6924 ± 500	57 ± 41	26 ± 25	30 ± 73	11 ± 61	−8 ± 32	364 ± 191
KRISS	−20 ± 132	10 ± 35	6912 ± 501	45 ± 46	14 ± 32	18 ± 75	−1 ± 64	−20 ± 38	352 ± 192
LCIE	5324 ± 702	5354 ± 690	12256 ± 852	5389 ± 691	5358 ± 690	5362 ± 694	5343 ± 693	5324 ± 691	5696 ± 716
METAS	−1 ± 190	29 ± 140	6931 ± 519	64 ± 143	33 ± 140	37 ± 155	18 ± 150	−1 ± 141	371 ± 235
NIM	−22 ± 131	8 ± 28	6910 ± 500	43 ± 41	12 ± 24	16 ± 72	−3 ± 61	−22 ± 31	350 ± 191
NIST		30 ± 133	6932 ± 517	65 ± 136	34 ± 132	38 ± 148	19 ± 143	0 ± 133	372 ± 230
NPL	−30 ± 133		6902 ± 501	35 ± 46	4 ± 33	8 ± 76	−11 ± 65	−30 ± 38	342 ± 192
NPLI	−6932 ± 517	−6902 ± 501		−6867 ± 502	−6898 ± 500	−6894 ± 505	−6913 ± 504	−6932 ± 501	−6560 ± 535
NRC	−65 ± 136	−35 ± 46	6867 ± 502		−31 ± 44	−27 ± 81	−46 ± 71	−65 ± 48	307 ± 194
PTB	−34 ± 132	−4 ± 33	6898 ± 500	31 ± 44		4 ± 74	−15 ± 63	−34 ± 35	338 ± 191
SP	−38 ± 148	−8 ± 76	6894 ± 505	27 ± 81	−4 ± 74		−19 ± 93	−38 ± 77	334 ± 203
UME	−19 ± 143	11 ± 65	6913 ± 504	46 ± 71	15 ± 63	19 ± 93		−19 ± 66	353 ± 199
VNIIM	0 ± 133	30 ± 38	6932 ± 501	65 ± 48	34 ± 35	38 ± 77	19 ± 66		372 ± 192
VSL	−372 ± 230	−342 ± 192	6560 ± 535	−307 ± 194	−338 ± 191	−334 ± 203	−353 ± 199	−372 ± 192	

Nominal Ratio: 3/11 at 1 kHz, Quadrature Voltage Ratio (KCRV $\pm$ 2σ) is (-1.6 $\pm$ 4.1) x 10^{-9} of input
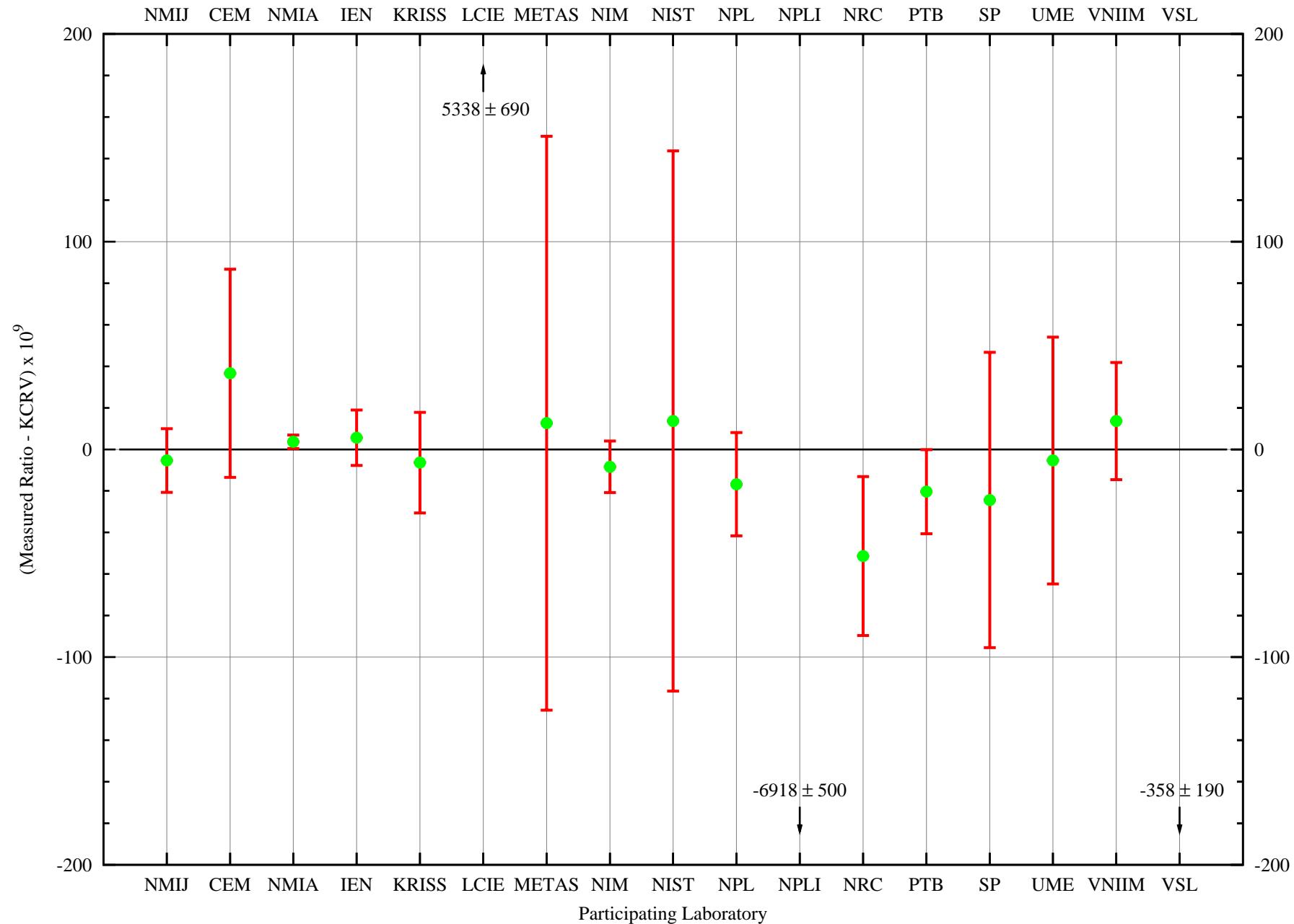
Table 88: Degree of equivalence to the KCRV for the Nominal Ratio 2/11 at 1 kHz, In-Phase Voltage Ratio (nV/V)

NMIJ	CEM	NMIA	IEN	KRISS	LCIE	METAS	NIM
1 ± 12	−23 ± 51	−1.6 ±11.7	0 ± 13	−2 ± 21	−170 ± 36	−6 ± 27	15 ± 12

NIST	NPL	NPLI	NRC	PTB	SP	UME	VNIIM	VSL
5 ± 65	−3 ± 27	6 ± 15	−17 ± 40	−13 ± 23	−5 ± 49	−12 ± 50	−12 ± 21	−19 ± 27

Table 89: Laboratory - Laboratory degree of equivalence for the Nominal Ratio 2/11 at 1 kHz, In-Phase Voltage Ratio (nV/V)

	NMIJ	CEM	NMIA	IEN	KRISS	LCIE	METAS	NIM
NMIJ		24 ± 53	3 ± 18	1 ± 20	3 ± 26	171 ± 39	7 ± 30	−14 ± 19
CEM	−24 ± 53		−21 ± 53	−23 ± 54	−21 ± 56	147 ± 63	−17 ± 58	−38 ± 53
NMIA	−3 ± 18	21 ± 53		−2 ± 19	0 ± 26	168 ± 39	4 ± 30	−17 ± 19
IEN	−1 ± 20	23 ± 54	2 ± 19		2 ± 26	170 ± 39	6 ± 31	−15 ± 20
KRISS	−3 ± 26	21 ± 56	0 ± 26	−2 ± 26		168 ± 43	4 ± 35	−17 ± 26
LCIE	−171 ± 39	−147 ± 63	−168 ± 39	−170 ± 39	−168 ± 43		−164 ± 45	−185 ± 39
METAS	−7 ± 30	17 ± 58	−4 ± 30	−6 ± 31	−4 ± 35	164 ± 45		−21 ± 30
NIM	14 ± 19	38 ± 53	17 ± 19	15 ± 20	17 ± 26	185 ± 39	21 ± 30	
NIST	4 ± 67	28 ± 83	7 ± 67	5 ± 67	7 ± 69	175 ± 75	11 ± 71	−10 ± 67
NPL	−5 ± 31	19 ± 59	−2 ± 31	−4 ± 31	−2 ± 35	166 ± 46	2 ± 39	−19 ± 31
NPLI	5 ± 20	29 ± 54	8 ± 20	6 ± 21	8 ± 27	176 ± 40	12 ± 31	−9 ± 21
NRC	−18 ± 42	6 ± 65	−15 ± 42	−17 ± 43	−15 ± 46	153 ± 54	−11 ± 48	−32 ± 42
PTB	−14 ± 27	10 ± 57	−11 ± 27	−13 ± 28	−11 ± 32	157 ± 43	−7 ± 36	−28 ± 27
SP	−6 ± 51	18 ± 72	−3 ± 51	−5 ± 52	−3 ± 54	165 ± 62	1 ± 57	−20 ± 51
UME	−13 ± 52	11 ± 72	−10 ± 52	−12 ± 52	−10 ± 55	158 ± 62	−6 ± 57	−27 ± 52
VNIIM	−13 ± 26	11 ± 56	−10 ± 26	−12 ± 26	−10 ± 31	158 ± 43	−6 ± 35	−27 ± 26
VSL	−20 ± 30	4 ± 58	−17 ± 30	−19 ± 31	−17 ± 35	151 ± 45	−13 ± 38	−34 ± 30

	NIST	NPL	NPLI	NRC	PTB	SP	UME	VNIIM	VSL
NMIJ	−4 ± 67	5 ± 31	−5 ± 20	18 ± 42	14 ± 27	6 ± 51	13 ± 52	13 ± 26	20 ± 30
CEM	−28 ± 83	−19 ± 59	−29 ± 54	−6 ± 65	−10 ± 57	−18 ± 72	−11 ± 72	−11 ± 56	−4 ± 58
NMIA	−7 ± 67	2 ± 31	−8 ± 20	15 ± 42	11 ± 27	3 ± 51	10 ± 52	10 ± 26	17 ± 30
IEN	−5 ± 67	4 ± 31	−6 ± 21	17 ± 43	13 ± 28	5 ± 52	12 ± 52	12 ± 26	19 ± 31
KRISS	−7 ± 69	2 ± 35	−8 ± 27	15 ± 46	11 ± 32	3 ± 54	10 ± 55	10 ± 31	17 ± 35
LCIE	−175 ± 75	−166 ± 46	−176 ± 40	−153 ± 54	−157 ± 43	−165 ± 62	−158 ± 62	−158 ± 43	−151 ± 45
METAS	−11 ± 71	−2 ± 39	−12 ± 31	11 ± 48	7 ± 36	−1 ± 57	6 ± 57	6 ± 35	13 ± 38
NIM	10 ± 67	19 ± 31	9 ± 21	32 ± 42	28 ± 27	20 ± 51	27 ± 52	27 ± 26	34 ± 30
NIST		9 ± 71	−1 ± 67	22 ± 77	18 ± 69	10 ± 82	17 ± 82	17 ± 69	24 ± 71
NPL	−9 ± 71		−10 ± 32	13 ± 49	9 ± 37	1 ± 57	8 ± 57	8 ± 35	15 ± 39
NPLI	1 ± 67	10 ± 32		23 ± 43	19 ± 28	11 ± 52	18 ± 52	18 ± 27	25 ± 31
NRC	−22 ± 77	−13 ± 49	−23 ± 43		−4 ± 47	−12 ± 64	−5 ± 64	−5 ± 46	2 ± 49
PTB	−18 ± 69	−9 ± 37	−19 ± 28	4 ± 47		−8 ± 55	−1 ± 55	−1 ± 32	6 ± 36
SP	−10 ± 82	−1 ± 57	−11 ± 52	12 ± 64	8 ± 55		7 ± 70	7 ± 54	14 ± 57
UME	−17 ± 82	−8 ± 57	−18 ± 52	5 ± 64	1 ± 55	−7 ± 70		0 ± 55	7 ± 57
VNIIM	−17 ± 69	−8 ± 35	−18 ± 27	5 ± 46	1 ± 32	−7 ± 54	0 ± 55		7 ± 35
VSL	−24 ± 71	−15 ± 39	−25 ± 31	−2 ± 49	−6 ± 36	−14 ± 57	−7 ± 57	−7 ± 35	

Nominal Ratio: 2/11 at 1 kHz, In-Phase Voltage Ratio (KCRV ± 2σ) is (-46.2 ± 5.1) x 10^{-9} of input

$\frac{\text{(Measured Ratio - 2/11 - KCRV) x } 10^9}$

Participating Laboratory

NMIJ CEM NMIA IEN KRISS LCIE METAS NIM NIST NPL NPLI NRC PTB SP UME VNIIM VSL

-170 ± 36

101
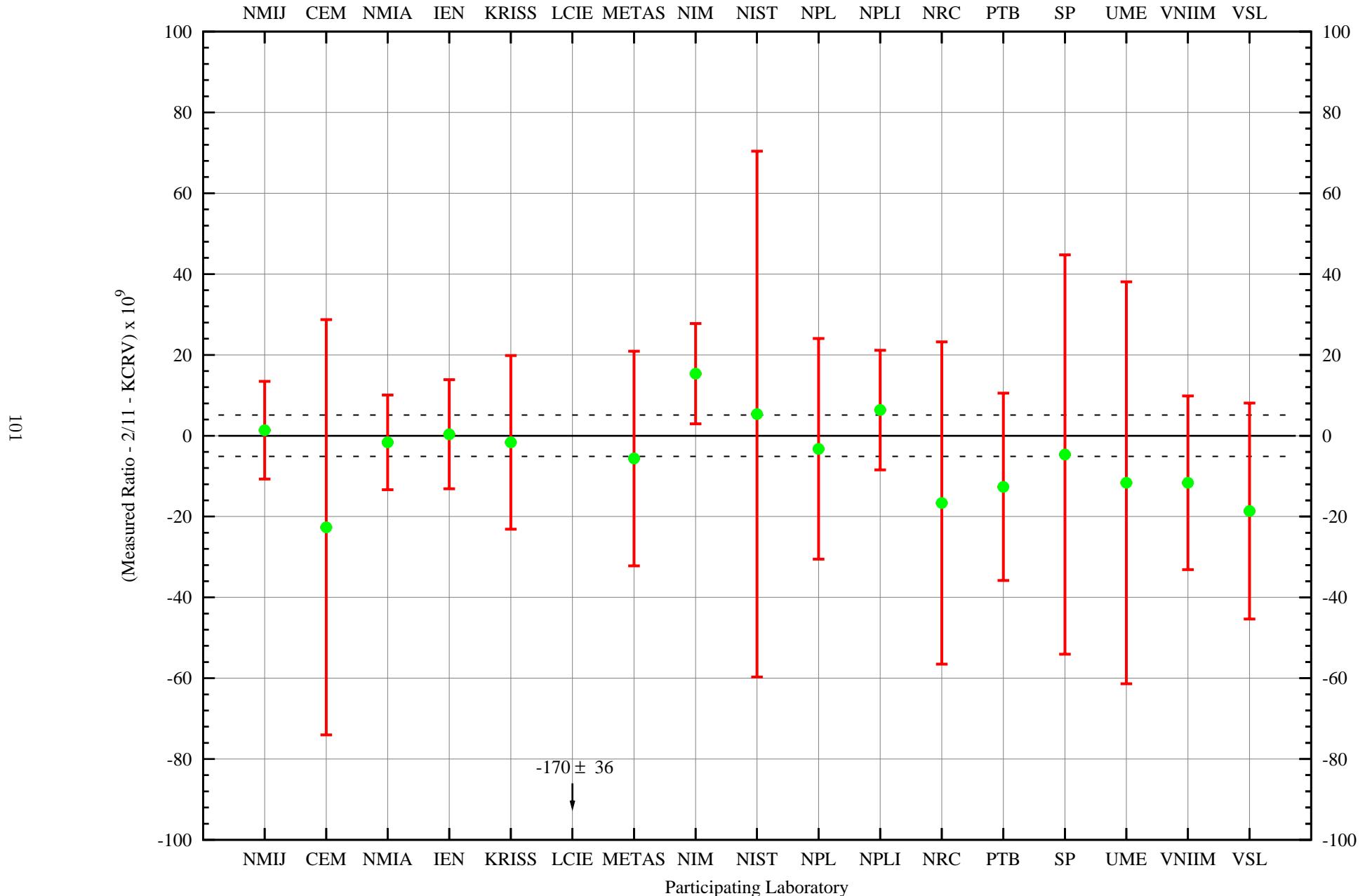
Table 90: Degree of equivalence to the KCRV for the Nominal Ratio 2/11 at 1 kHz, Quadrature Voltage Ratio (nV/V)

NMIJ	CEM	NMIA	IEN	KRISS	LCIE	METAS	NIM
−2 ± 12	29 ± 50	1.1 ± 3.2	7 ± 11	4 ± 24	7062 ± 690	9 ± 113	−25 ± 12

NIST	NPL	NPLI	NRC	PTB	SP	UME	VNIIM	VSL
6 ± 120	−14 ± 25	−4519 ± 500	−37 ± 38	−17 ± 20	−27 ± 71	−1 ± 59	4 ± 28	−239 ± 160

Table 91: Laboratory - Laboratory degree of equivalence for the Nominal Ratio 2/11 at 1 kHz, Quadrature Voltage Ratio (nV/V)

	NMIJ	CEM	NMIA	IEN	KRISS	LCIE	METAS	NIM
NMIJ		−31 ± 52	−3 ± 14	−9 ± 17	−6 ± 28	−7064 ± 690	−11 ± 114	23 ± 18
CEM	31 ± 52		28 ± 51	22 ± 52	25 ± 56	−7033 ± 692	20 ± 124	54 ± 52
NMIA	3 ± 14	−28 ± 51		−6 ± 13	−3 ± 25	−7061 ± 690	−8 ± 114	26 ± 14
IEN	9 ± 17	−22 ± 52	6 ± 13		3 ± 27	−7055 ± 690	−2 ± 114	32 ± 18
KRISS	6 ± 28	−25 ± 56	3 ± 25	−3 ± 27		−7058 ± 690	−5 ± 116	29 ± 28
LCIE	7064 ± 690	7033 ± 692	7061 ± 690	7055 ± 690	7058 ± 690		7053 ± 699	7087 ± 690
METAS	11 ± 114	−20 ± 124	8 ± 114	2 ± 114	5 ± 116	−7053 ± 699		34 ± 114
NIM	−23 ± 18	−54 ± 52	−26 ± 14	−32 ± 18	−29 ± 28	−7087 ± 690	−34 ± 114	
NIST	8 ± 121	−23 ± 130	5 ± 120	−1 ± 121	2 ± 123	−7056 ± 700	−3 ± 165	31 ± 121
NPL	−12 ± 28	−44 ± 56	−16 ± 26	−22 ± 28	−18 ± 35	−7076 ± 690	−24 ± 116	10 ± 28
NPLI	−4517 ± 500	−4548 ± 503	−4520 ± 500	−4526 ± 500	−4523 ± 501	−11581 ± 852	−4528 ± 513	−4494 ± 500
NRC	−35 ± 40	−66 ± 63	−38 ± 39	−44 ± 40	−41 ± 46	−7099 ± 691	−46 ± 120	−12 ± 41
PTB	−15 ± 24	−46 ± 54	−18 ± 21	−24 ± 24	−21 ± 32	−7079 ± 690	−26 ± 115	8 ± 24
SP	−25 ± 72	−56 ± 87	−28 ± 71	−34 ± 72	−31 ± 75	−7089 ± 694	−36 ± 134	−2 ± 72
UME	1 ± 61	−30 ± 78	−2 ± 60	−8 ± 61	−5 ± 64	−7063 ± 693	−10 ± 128	24 ± 61
VNIIM	6 ± 31	−25 ± 58	3 ± 29	−3 ± 31	0 ± 38	−7058 ± 691	−5 ± 117	29 ± 31
VSL	−237 ± 161	−268 ± 168	−240 ± 160	−246 ± 161	−243 ± 162	−7301 ± 708	−248 ± 196	−214 ± 161

	NIST	NPL	NPLI	NRC	PTB	SP	UME	VNIIM	VSL
NMIJ	−8 ± 121	12 ± 28	4517 ± 500	35 ± 40	15 ± 24	25 ± 72	−1 ± 61	−6 ± 31	237 ± 161
CEM	23 ± 130	44 ± 56	4548 ± 503	66 ± 63	46 ± 54	56 ± 87	30 ± 78	25 ± 58	268 ± 168
NMIA	−5 ± 120	16 ± 26	4520 ± 500	38 ± 39	18 ± 21	28 ± 71	2 ± 60	−3 ± 29	240 ± 160
IEN	1 ± 121	22 ± 28	4526 ± 500	44 ± 40	24 ± 24	34 ± 72	8 ± 61	3 ± 31	246 ± 161
KRISS	−2 ± 123	18 ± 35	4523 ± 501	41 ± 46	21 ± 32	31 ± 75	5 ± 64	0 ± 38	243 ± 162
LCIE	7056 ± 700	7076 ± 690	11581 ± 852	7099 ± 691	7079 ± 690	7089 ± 694	7063 ± 693	7058 ± 691	7301 ± 708
METAS	3 ± 165	24 ± 116	4528 ± 513	46 ± 120	26 ± 115	36 ± 134	10 ± 128	5 ± 117	248 ± 196
NIM	−31 ± 121	−10 ± 28	4494 ± 500	12 ± 41	−8 ± 24	2 ± 72	−24 ± 61	−29 ± 31	214 ± 161
NIST		20 ± 123	4525 ± 514	43 ± 126	23 ± 122	33 ± 140	7 ± 134	2 ± 123	245 ± 200
NPL	−20 ± 123		4504 ± 501	22 ± 46	2 ± 33	12 ± 76	−14 ± 65	−18 ± 38	224 ± 162
NPLI	−4525 ± 514	−4504 ± 501		−4482 ± 502	−4502 ± 500	−4492 ± 505	−4518 ± 504	−4523 ± 501	−4280 ± 525
NRC	−43 ± 126	−22 ± 46	4482 ± 502		−20 ± 44	−10 ± 81	−36 ± 71	−41 ± 48	202 ± 165
PTB	−23 ± 122	−2 ± 33	4502 ± 500	20 ± 44		10 ± 74	−16 ± 63	−21 ± 35	222 ± 161
SP	−33 ± 140	−12 ± 76	4492 ± 505	10 ± 81	−10 ± 74		−26 ± 93	−31 ± 77	212 ± 175
UME	−7 ± 134	14 ± 65	4518 ± 504	36 ± 71	16 ± 63	26 ± 93		−5 ± 66	238 ± 171
VNIIM	−2 ± 123	18 ± 38	4523 ± 501	41 ± 48	21 ± 35	31 ± 77	5 ± 66		243 ± 163
VSL	−245 ± 200	−224 ± 162	4280 ± 525	−202 ± 165	−222 ± 161	−212 ± 175	−238 ± 171	−243 ± 163	

Nominal Ratio: 2/11 at 1 kHz, Quadrature Voltage Ratio (KCRV $\pm$ 2σ) is (48.9 $\pm$ 4.1) x 10^{-9} of input
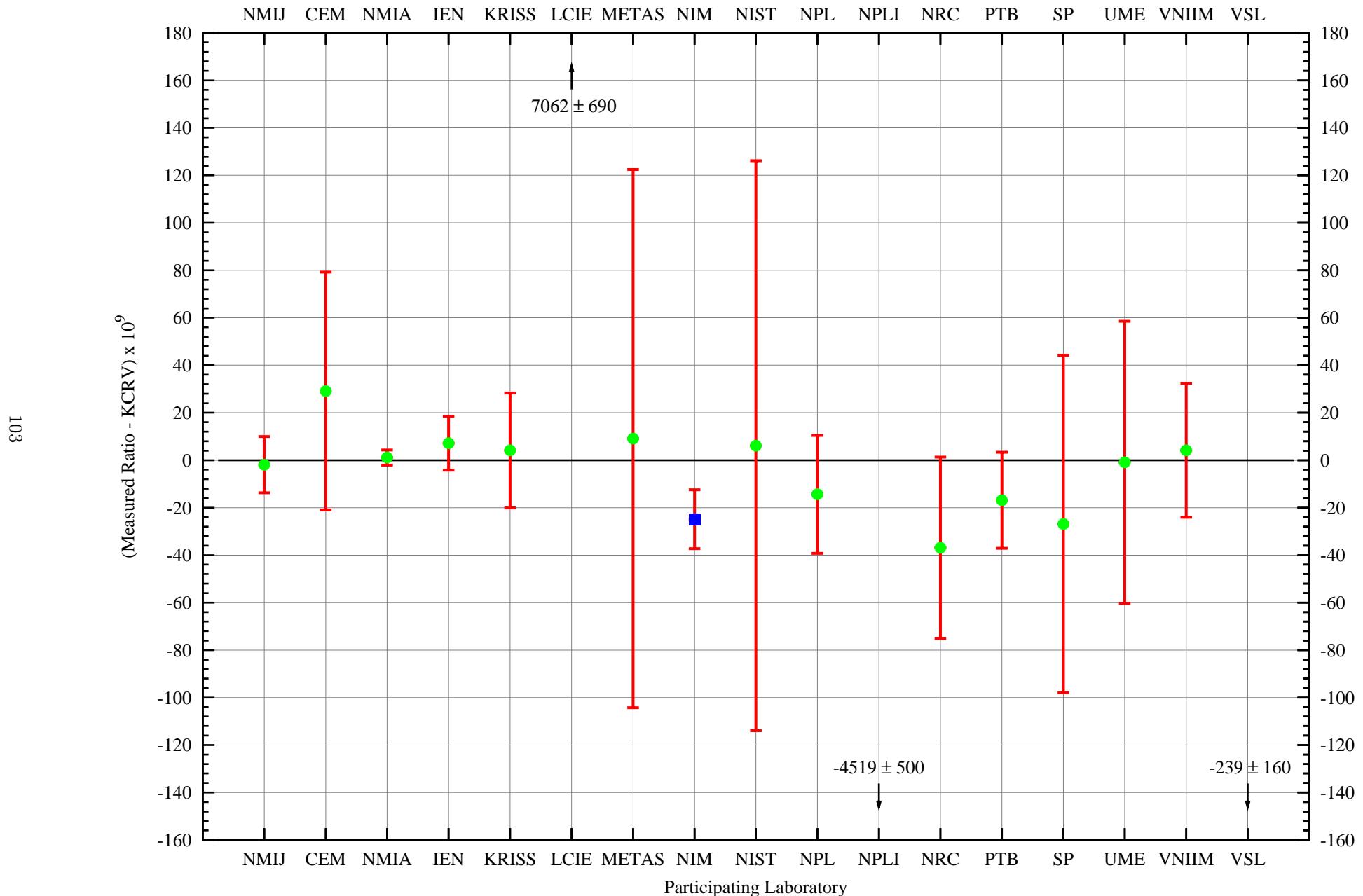
Table 92: Degree of equivalence to the KCRV for the Nominal Ratio 1/11 at 1 kHz, In-Phase Voltage Ratio (nV/V)

NMIJ	CEM	NMIA	IEN	KRISS	LCIE	METAS	NIM
$-0 \pm$ 12	$-14 \pm$ 51	-0.2 ± 11.8	$11 \pm$ 15	$-1 \pm$ 22	$-62 \pm$ 37	$-4 \pm$ 21	$10 \pm$ 12

NIST	NPL	NPLI	NRC	PTB	SP	UME	VNIIM	VSL
$5 \pm$ 63	$-1 \pm$ 27	$6 \pm$ 15	$-9 \pm$ 40	$-9 \pm$ 23	$-10 \pm$ 49	$-5 \pm$ 50	$-5 \pm$ 22	$-9 \pm$ 21

Table 93: Laboratory - Laboratory degree of equivalence for the Nominal Ratio 1/11 at 1 kHz, In-Phase Voltage Ratio (nV/V)

	NMIJ	CEM	NMIA	IEN	KRISS	LCIE	METAS	NIM
NMIJ		$14 \pm$ 53	$0 \pm$ 18	$-11 \pm$ 20	$1 \pm$ 26	$62 \pm$ 39	$4 \pm$ 25	$-10 \pm$ 19
CEM	$-14 \pm$ 53		$-14 \pm$ 53	$-25 \pm$ 54	$-13 \pm$ 56	$48 \pm$ 64	$-10 \pm$ 56	$-24 \pm$ 53
NMIA	$0 \pm$ 18	$14 \pm$ 53		$-11 \pm$ 20	$1 \pm$ 26	$62 \pm$ 39	$4 \pm$ 25	$-10 \pm$ 19
IEN	$11 \pm$ 20	$25 \pm$ 54	$11 \pm$ 20		$12 \pm$ 27	$73 \pm$ 40	$15 \pm$ 26	$1 \pm$ 20
KRISS	$-1 \pm$ 26	$13 \pm$ 56	$-1 \pm$ 26	$-12 \pm$ 27		$61 \pm$ 43	$3 \pm$ 31	$-11 \pm$ 26
LCIE	$-62 \pm$ 39	$-48 \pm$ 64	$-62 \pm$ 39	$-73 \pm$ 40	$-61 \pm$ 43		$-58 \pm$ 43	$-72 \pm$ 40
METAS	$-4 \pm$ 25	$10 \pm$ 56	$-4 \pm$ 25	$-15 \pm$ 26	$-3 \pm$ 31	$58 \pm$ 43		$-14 \pm$ 25
NIM	$10 \pm$ 19	$24 \pm$ 53	$10 \pm$ 19	$-1 \pm$ 20	$11 \pm$ 26	$72 \pm$ 40	$14 \pm$ 25	
NIST	$5 \pm$ 65	$19 \pm$ 82	$5 \pm$ 65	$-6 \pm$ 65	$6 \pm$ 67	$67 \pm$ 73	$9 \pm$ 67	$-5 \pm$ 65
NPL	$-1 \pm$ 31	$13 \pm$ 59	$-1 \pm$ 31	$-12 \pm$ 32	$-0 \pm$ 35	$61 \pm$ 46	$3 \pm$ 35	$-11 \pm$ 31
NPLI	$6 \pm$ 20	$20 \pm$ 54	$6 \pm$ 20	$-5 \pm$ 22	$7 \pm$ 27	$68 \pm$ 40	$10 \pm$ 27	$-4 \pm$ 21
NRC	$-9 \pm$ 42	$5 \pm$ 65	$-9 \pm$ 42	$-20 \pm$ 43	$-8 \pm$ 46	$53 \pm$ 55	$-5 \pm$ 46	$-19 \pm$ 42
PTB	$-9 \pm$ 27	$5 \pm$ 57	$-9 \pm$ 27	$-20 \pm$ 28	$-8 \pm$ 32	$53 \pm$ 44	$-5 \pm$ 32	$-19 \pm$ 27
SP	$-10 \pm$ 51	$4 \pm$ 72	$-10 \pm$ 51	$-21 \pm$ 52	$-9 \pm$ 54	$52 \pm$ 62	$-6 \pm$ 54	$-20 \pm$ 51
UME	$-5 \pm$ 52	$9 \pm$ 72	$-5 \pm$ 52	$-16 \pm$ 52	$-4 \pm$ 55	$57 \pm$ 62	$-1 \pm$ 54	$-15 \pm$ 52
VNIIM	$-5 \pm$ 26	$9 \pm$ 56	$-5 \pm$ 26	$-16 \pm$ 27	$-4 \pm$ 31	$57 \pm$ 43	$-1 \pm$ 31	$-15 \pm$ 26
VSL	$-9 \pm$ 25	$5 \pm$ 56	$-9 \pm$ 25	$-20 \pm$ 26	$-8 \pm$ 31	$53 \pm$ 43	$-5 \pm$ 30	$-19 \pm$ 25

	NIST	NPL	NPLI	NRC	PTB	SP	UME	VNIIM	VSL
NMIJ	$-5 \pm$ 65	$1 \pm$ 31	$-6 \pm$ 20	$9 \pm$ 42	$9 \pm$ 27	$10 \pm$ 51	$5 \pm$ 52	$5 \pm$ 26	$9 \pm$ 25
CEM	$-19 \pm$ 82	$-13 \pm$ 59	$-20 \pm$ 54	$-5 \pm$ 65	$-5 \pm$ 57	$-4 \pm$ 72	$-9 \pm$ 72	$-9 \pm$ 56	$-5 \pm$ 56
NMIA	$-5 \pm$ 65	$1 \pm$ 31	$-6 \pm$ 20	$9 \pm$ 42	$9 \pm$ 27	$10 \pm$ 51	$5 \pm$ 52	$5 \pm$ 26	$9 \pm$ 25
IEN	$6 \pm$ 65	$12 \pm$ 32	$5 \pm$ 22	$20 \pm$ 43	$20 \pm$ 28	$21 \pm$ 52	$16 \pm$ 52	$16 \pm$ 27	$20 \pm$ 26
KRISS	$-6 \pm$ 67	$0 \pm$ 35	$-7 \pm$ 27	$8 \pm$ 46	$8 \pm$ 32	$9 \pm$ 54	$4 \pm$ 55	$4 \pm$ 31	$8 \pm$ 31
LCIE	$-67 \pm$ 73	$-61 \pm$ 46	$-68 \pm$ 40	$-53 \pm$ 55	$-53 \pm$ 44	$-52 \pm$ 62	$-57 \pm$ 62	$-57 \pm$ 43	$-53 \pm$ 43
METAS	$-9 \pm$ 67	$-3 \pm$ 35	$-10 \pm$ 27	$5 \pm$ 46	$5 \pm$ 32	$6 \pm$ 54	$1 \pm$ 54	$1 \pm$ 31	$5 \pm$ 30
NIM	$5 \pm$ 65	$11 \pm$ 31	$4 \pm$ 21	$19 \pm$ 42	$19 \pm$ 27	$20 \pm$ 51	$15 \pm$ 52	$15 \pm$ 26	$19 \pm$ 25
NIST		$6 \pm$ 69	$-1 \pm$ 65	$14 \pm$ 75	$14 \pm$ 68	$15 \pm$ 80	$10 \pm$ 81	$10 \pm$ 67	$14 \pm$ 67
NPL	$-6 \pm$ 69		$-7 \pm$ 32	$8 \pm$ 49	$8 \pm$ 37	$9 \pm$ 57	$4 \pm$ 57	$4 \pm$ 35	$8 \pm$ 35
NPLI	$1 \pm$ 65	$7 \pm$ 32		$15 \pm$ 43	$15 \pm$ 28	$16 \pm$ 52	$11 \pm$ 52	$11 \pm$ 27	$15 \pm$ 26
NRC	$-14 \pm$ 75	$-8 \pm$ 49	$-15 \pm$ 43		$0 \pm$ 47	$1 \pm$ 64	$-4 \pm$ 64	$-4 \pm$ 46	$0 \pm$ 45
PTB	$-14 \pm$ 68	$-8 \pm$ 37	$-15 \pm$ 28	$0 \pm$ 47		$1 \pm$ 55	$-4 \pm$ 55	$-4 \pm$ 32	$0 \pm$ 32
SP	$-15 \pm$ 80	$-9 \pm$ 57	$-16 \pm$ 52	$-1 \pm$ 64	$-1 \pm$ 55		$-5 \pm$ 70	$-5 \pm$ 54	$-1 \pm$ 54
UME	$-10 \pm$ 81	$-4 \pm$ 57	$-11 \pm$ 52	$4 \pm$ 64	$4 \pm$ 55	$5 \pm$ 70		$0 \pm$ 55	$4 \pm$ 54
VNIIM	$-10 \pm$ 67	$-4 \pm$ 35	$-11 \pm$ 27	$4 \pm$ 46	$4 \pm$ 32	$5 \pm$ 54	$0 \pm$ 55		$4 \pm$ 31
VSL	$-14 \pm$ 67	$-8 \pm$ 35	$-15 \pm$ 26	$0 \pm$ 45	$0 \pm$ 32	$1 \pm$ 54	$-4 \pm$ 54	$-4 \pm$ 31	

Nominal Ratio: 1/11 at 1 kHz, In-Phase Voltage Ratio (KCRV $\pm$ 2σ) is (-49.7 $\pm$ 5.0) x 10^{-9} of input
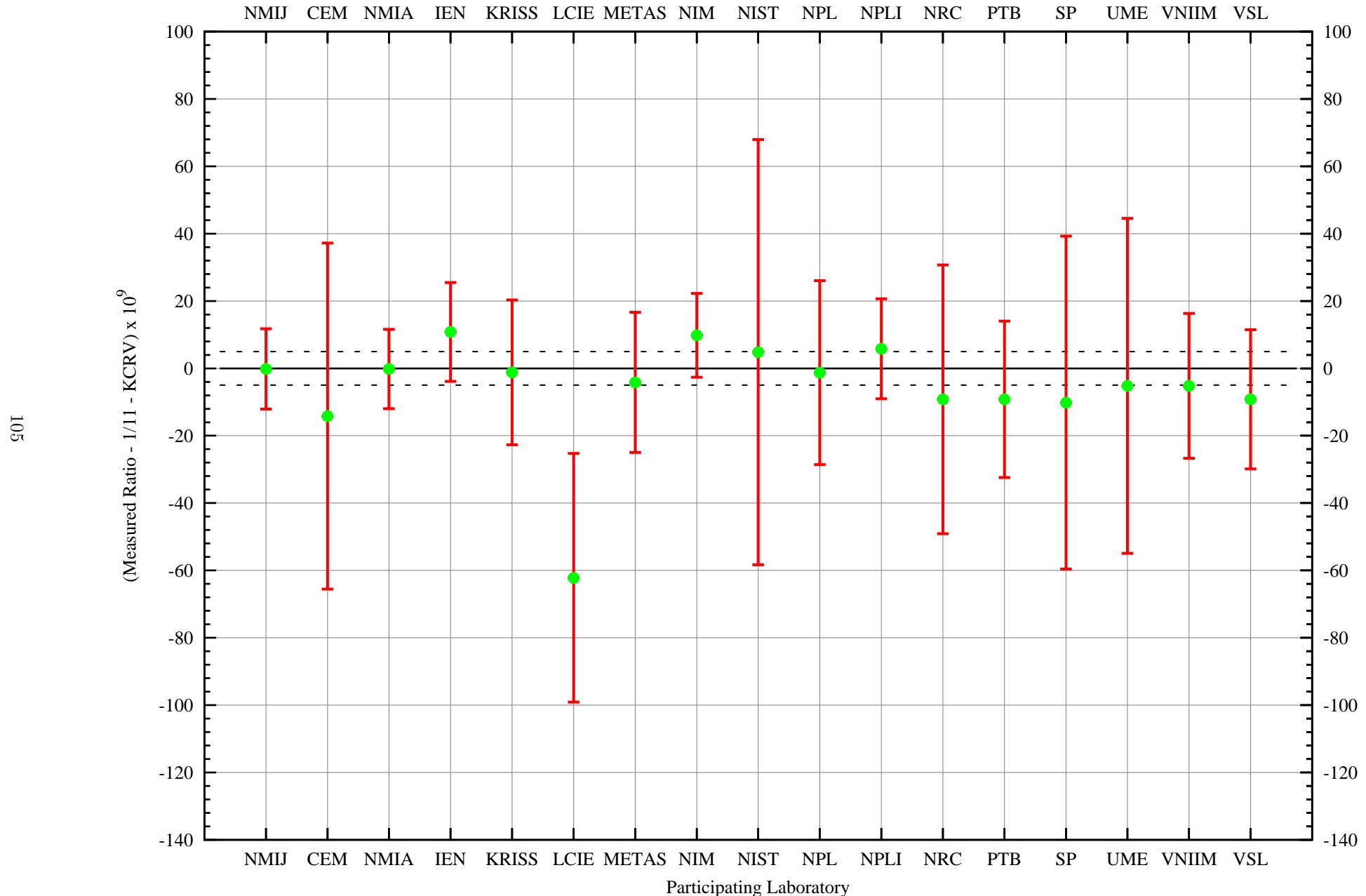
Table 94: Degree of equivalence to the KCRV for the Nominal Ratio 1/11 at 1 kHz, Quadrature Voltage Ratio (nV/V)

NMIJ	CEM	NMIA	IEN	KRISS	LCIE	METAS	NIM
4 ± 9	20 ± 50	2.4 ± 3.7	−13 ± 13	2 ± 24	4893 ± 35	9 ± 71	−4 ± 9

NIST	NPL	NPLI	NRC	PTB	SP	UME	VNIIM	VSL
6 ± 120	−6 ± 25	−2260 ± 500	−16 ± 38	−7 ± 20	−23 ± 71	6 ± 59	2 ± 28	−110 ± 120

Table 95: Laboratory - Laboratory degree of equivalence for the Nominal Ratio 1/11 at 1 kHz, Quadrature Voltage Ratio (nV/V)

	NMIJ	CEM	NMIA	IEN	KRISS	LCIE	METAS	NIM
NMIJ		−16 ± 51	2 ± 11	17 ± 16	2 ± 26	−4889 ± 37	−5 ± 71	8 ± 13
CEM	16 ± 51		18 ± 51	33 ± 52	18 ± 56	−4873 ± 61	11 ± 87	24 ± 51
NMIA	−2 ± 11	−18 ± 51		15 ± 14	0 ± 25	−4891 ± 36	−7 ± 71	6 ± 11
IEN	−17 ± 16	−33 ± 52	−15 ± 14		−15 ± 28	−4906 ± 38	−22 ± 72	−9 ± 16
KRISS	−2 ± 26	−18 ± 56	0 ± 25	15 ± 28		−4891 ± 43	−7 ± 75	6 ± 26
LCIE	4889 ± 37	4873 ± 61	4891 ± 36	4906 ± 38	4891 ± 43		4884 ± 79	4897 ± 37
METAS	5 ± 71	−11 ± 87	7 ± 71	22 ± 72	7 ± 75	−4884 ± 79		13 ± 71
NIM	−8 ± 13	−24 ± 51	−6 ± 11	9 ± 16	−6 ± 26	−4897 ± 37	−13 ± 71	
NIST	2 ± 120	−14 ± 130	4 ± 120	19 ± 121	4 ± 123	−4887 ± 125	−3 ± 139	10 ± 120
NPL	−10 ± 27	−26 ± 56	−8 ± 26	7 ± 29	−8 ± 35	−4899 ± 43	−15 ± 75	−2 ± 27
NPLI	−2264 ± 500	−2280 ± 503	−2262 ± 500	−2247 ± 500	−2262 ± 501	−7153 ± 501	−2269 ± 505	−2256 ± 500
NRC	−20 ± 40	−36 ± 63	−18 ± 39	−3 ± 41	−18 ± 46	−4909 ± 52	−25 ± 80	−12 ± 40
PTB	−11 ± 23	−27 ± 54	−9 ± 21	6 ± 25	−9 ± 32	−4900 ± 41	−16 ± 74	−3 ± 23
SP	−27 ± 72	−43 ± 87	−25 ± 71	−10 ± 72	−25 ± 75	−4916 ± 79	−32 ± 100	−19 ± 72
UME	2 ± 60	−14 ± 78	4 ± 60	19 ± 61	4 ± 64	−4887 ± 69	−3 ± 92	10 ± 60
VNIIM	−2 ± 30	−18 ± 58	0 ± 29	15 ± 31	0 ± 38	−4891 ± 45	−7 ± 76	6 ± 30
VSL	−114 ± 120	−130 ± 130	−112 ± 120	−97 ± 121	−112 ± 123	−5003 ± 125	−119 ± 139	−106 ± 120

	NIST	NPL	NPLI	NRC	PTB	SP	UME	VNIIM	VSL
NMIJ	−2 ± 120	10 ± 27	2264 ± 500	20 ± 40	11 ± 23	27 ± 72	−2 ± 60	2 ± 30	114 ± 120
CEM	14 ± 130	26 ± 56	2280 ± 503	36 ± 63	27 ± 54	43 ± 87	14 ± 78	18 ± 58	130 ± 130
NMIA	−4 ± 120	8 ± 26	2262 ± 500	18 ± 39	9 ± 21	25 ± 71	−4 ± 60	0 ± 29	112 ± 120
IEN	−19 ± 121	−7 ± 29	2247 ± 500	3 ± 41	−6 ± 25	10 ± 72	−19 ± 61	−15 ± 31	97 ± 121
KRISS	−4 ± 123	8 ± 35	2262 ± 501	18 ± 46	9 ± 32	25 ± 75	−4 ± 64	0 ± 38	112 ± 123
LCIE	4887 ± 125	4899 ± 43	7153 ± 501	4909 ± 52	4900 ± 41	4916 ± 79	4887 ± 69	4891 ± 45	5003 ± 125
METAS	3 ± 139	15 ± 75	2269 ± 505	25 ± 80	16 ± 74	32 ± 100	3 ± 92	7 ± 76	119 ± 139
NIM	−10 ± 120	2 ± 27	2256 ± 500	12 ± 40	3 ± 23	19 ± 72	−10 ± 60	−6 ± 30	106 ± 120
NIST		12 ± 123	2266 ± 514	22 ± 126	13 ± 122	29 ± 140	0 ± 134	4 ± 123	116 ± 170
NPL	−12 ± 123		2254 ± 501	10 ± 46	1 ± 33	17 ± 76	−12 ± 65	−8 ± 38	104 ± 123
NPLI	−2266 ± 514	−2254 ± 501		−2244 ± 502	−2253 ± 500	−2237 ± 505	−2266 ± 504	−2262 ± 501	−2150 ± 514
NRC	−22 ± 126	−10 ± 46	2244 ± 502		−9 ± 44	7 ± 81	−22 ± 71	−18 ± 48	94 ± 126
PTB	−13 ± 122	−1 ± 33	2253 ± 500	9 ± 44		16 ± 74	−13 ± 63	−9 ± 35	103 ± 122
SP	−29 ± 140	−17 ± 76	2237 ± 505	−7 ± 81	−16 ± 74		−29 ± 93	−25 ± 77	87 ± 140
UME	0 ± 134	12 ± 65	2266 ± 504	22 ± 71	13 ± 63	29 ± 93		4 ± 66	116 ± 134
VNIIM	−4 ± 123	8 ± 38	2262 ± 501	18 ± 48	9 ± 35	25 ± 77	−4 ± 66		112 ± 123
VSL	−116 ± 170	−104 ± 123	2150 ± 514	−94 ± 126	−103 ± 122	−87 ± 140	−116 ± 134	−112 ± 123	

Nominal Ratio: 1/11 at 1 kHz, Quadrature Voltage Ratio (KCRV ± 2σ) is (59.6 ± 3.7) x 10^{-9} of input
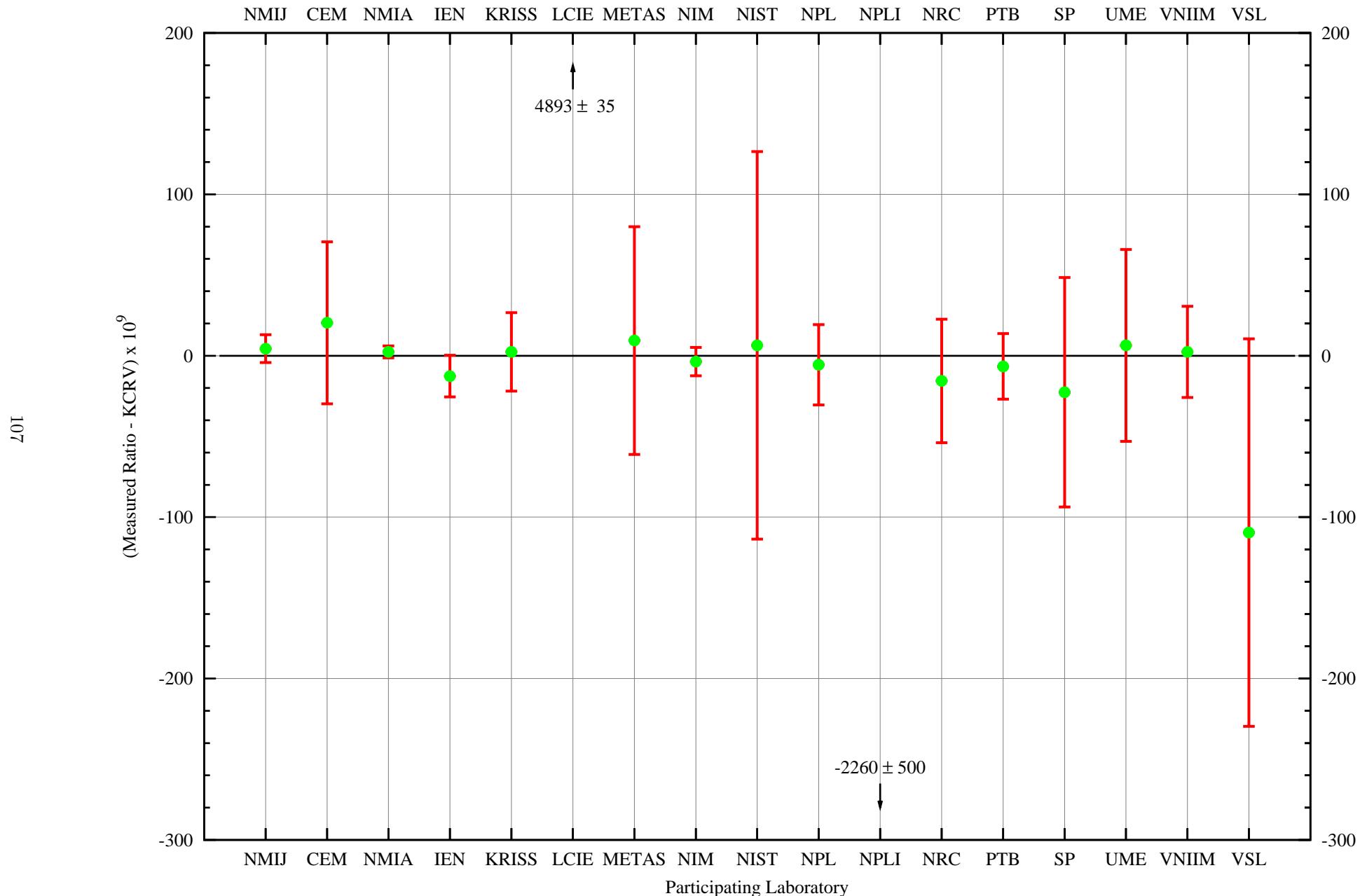
Table 96: Degree of equivalence to the KCRV for the Nominal Ratio 0.9 at 55 Hz, In-Phase Voltage Ratio (nV/V)

NMIA	METAS	NIM	NPL	NPLI	PTB	VSL
4.1 ± 7.6	5 ± 65	−32 ± 14	−1 ± 67	−26 ± 31	0 ± 21	−15 ± 100

Table 97: Laboratory - Laboratory degree of equivalence for the Nominal Ratio 0.9 at 55 Hz, In-Phase Voltage Ratio (nV/V)

	NMIA	METAS	NIM	NPL	NPLI	PTB	VSL
NMIA		−1 ± 67	36 ± 22	5 ± 69	30 ± 35	4 ± 27	19 ± 102
METAS	1 ± 67		37 ± 68	6 ± 95	31 ± 73	5 ± 70	20 ± 120
NIM	−36 ± 22	−37 ± 68		−31 ± 70	−6 ± 37	−32 ± 30	−17 ± 102
NPL	−5 ± 69	−6 ± 95	31 ± 70		25 ± 76	−1 ± 72	14 ± 122
NPLI	−30 ± 35	−31 ± 73	6 ± 37	−25 ± 76		−26 ± 40	−11 ± 106
PTB	−4 ± 27	−5 ± 70	32 ± 30	1 ± 72	26 ± 40		15 ± 104
VSL	−19 ± 102	−20 ± 120	17 ± 102	−14 ± 122	11 ± 106	−15 ± 104	

Nominal Ratio: 0.9 at 55 Hz, In-Phase Voltage Ratio (KCRV $\pm$ 2σ) is (-45.1 $\pm$ 10.3) x 10^{-9} of input
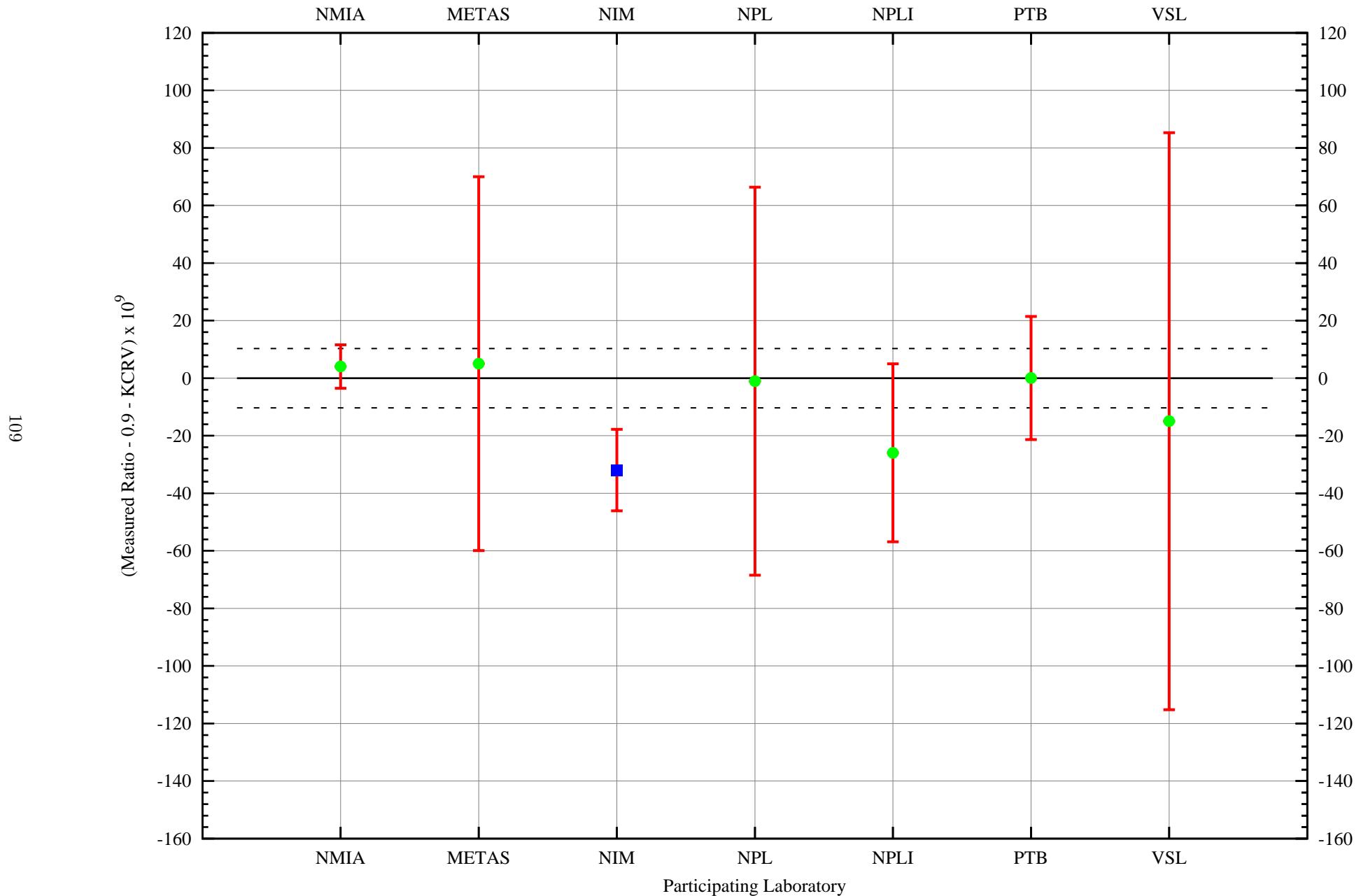
Table 98: Degree of equivalence to the KCRV for the Nominal Ratio 0.9 at 55 Hz, Quadrature Voltage Ratio (nV/V)

NMIA	METAS	NIM	NPL	NPLI	PTB	VSL
0.1 ± 2.0	22 ± 92	−5 ± 16	4 ± 68	−7801 ± 300	5 ± 20	−41 ±1000

Table 99: Laboratory - Laboratory degree of equivalence for the Nominal Ratio 0.9 at 55 Hz, Quadrature Voltage Ratio (nV/V)

	NMIA	METAS	NIM	NPL	NPLI	PTB	VSL
NMIA		−22 ± 92	5 ± 18	−4 ± 69	7801 ± 300	−5 ± 21	41 ±1000
METAS	22 ± 92		27 ± 93	18 ± 115	7823 ± 314	17 ± 94	63 ±1004
NIM	−5 ± 18	−27 ± 93		−9 ± 71	7796 ± 301	−10 ± 27	36 ±1000
NPL	4 ± 69	−18 ± 115	9 ± 71		7805 ± 308	−1 ± 72	45 ±1002
NPLI	−7801 ± 300	−7823 ± 314	−7796 ± 301	−7805 ± 308		−7806 ± 301	−7760 ±1044
PTB	5 ± 21	−17 ± 94	10 ± 27	1 ± 72	7806 ± 301		46 ±1000
VSL	−41 ±1000	−63 ±1004	−36 ±1000	−45 ±1002	7760 ±1044	−46 ±1000	

Nominal Ratio: 0.9 at 55 Hz, Quadrature Voltage Ratio (KCRV $\pm$ 2σ) is (120.9 $\pm$ 4.8) x 10^{-9} of input

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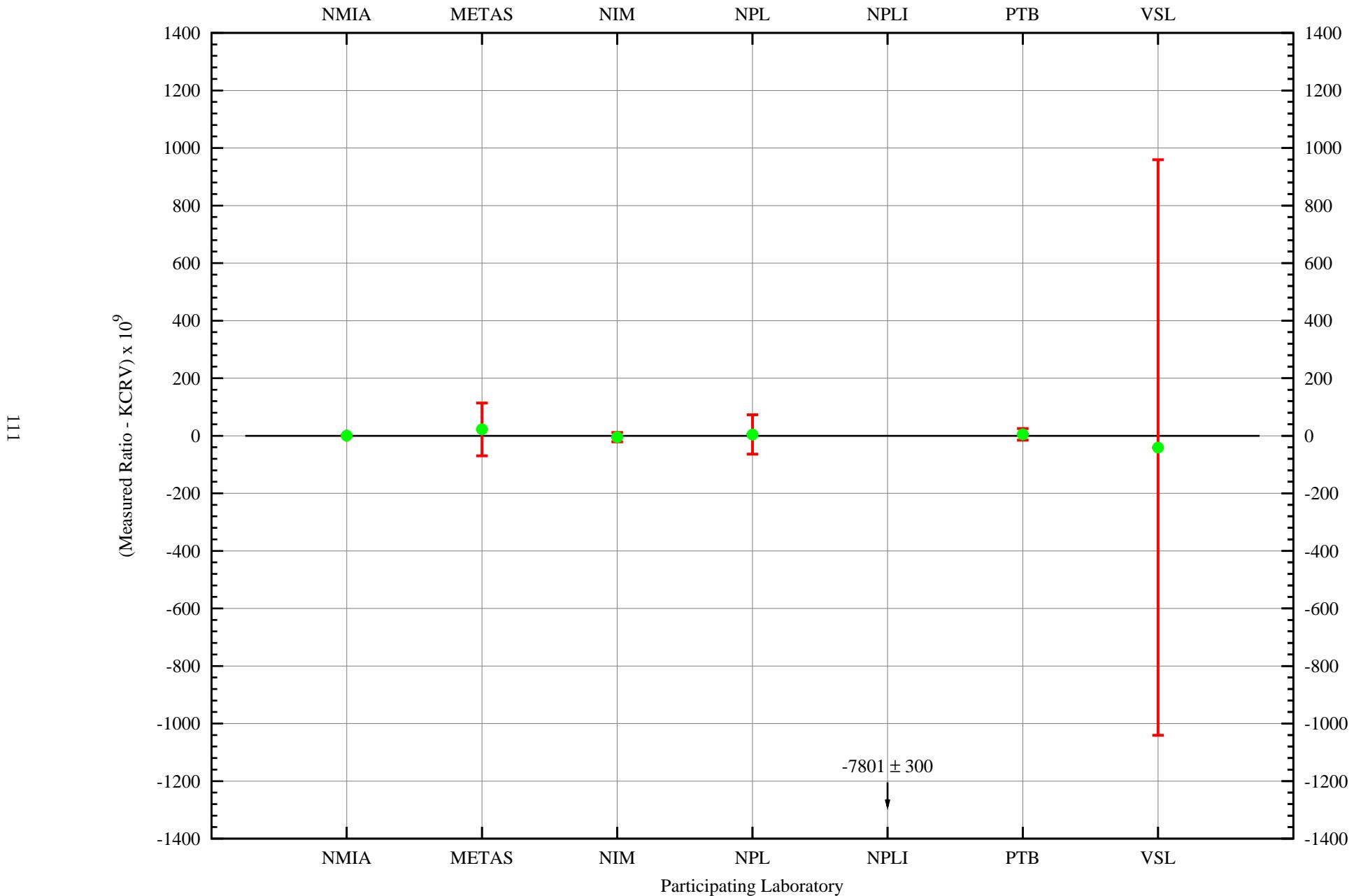
Table 100: Degree of equivalence to the KCRV for the Nominal Ratio 0.8 at 55 Hz, In-Phase Voltage Ratio (nV/V)

NMIA	METAS	NIM	NPL	NPLI	PTB	VSL
0.4 ± 7.5	2 ± 90	−57 ± 21	−7 ± 67	17 ± 31	−8 ± 21	−44 ± 100

Table 101: Laboratory - Laboratory degree of equivalence for the Nominal Ratio 0.8 at 55 Hz, In-Phase Voltage Ratio (nV/V)

	NMIA	METAS	NIM	NPL	NPLI	PTB	VSL
NMIA		−2 ± 92	57 ± 27	7 ± 69	−17 ± 35	8 ± 27	44 ± 102
METAS	2 ± 92		59 ± 94	9 ± 114	−15 ± 97	10 ± 94	46 ± 136
NIM	−57 ± 27	−59 ± 94		−50 ± 72	−74 ± 40	−49 ± 34	−13 ± 104
NPL	−7 ± 69	−9 ± 114	50 ± 72		−24 ± 76	1 ± 72	37 ± 122
NPLI	17 ± 35	15 ± 97	74 ± 40	24 ± 76		25 ± 40	61 ± 106
PTB	−8 ± 27	−10 ± 94	49 ± 34	−1 ± 72	−25 ± 40		36 ± 104
VSL	−44 ± 102	−46 ± 136	13 ± 104	−37 ± 122	−61 ± 106	−36 ± 104	

Nominal Ratio: 0.8 at 55 Hz, In-Phase Voltage Ratio (KCRV ± 2σ) is (-96.4 ± 10.4) x 10^{-9} of input
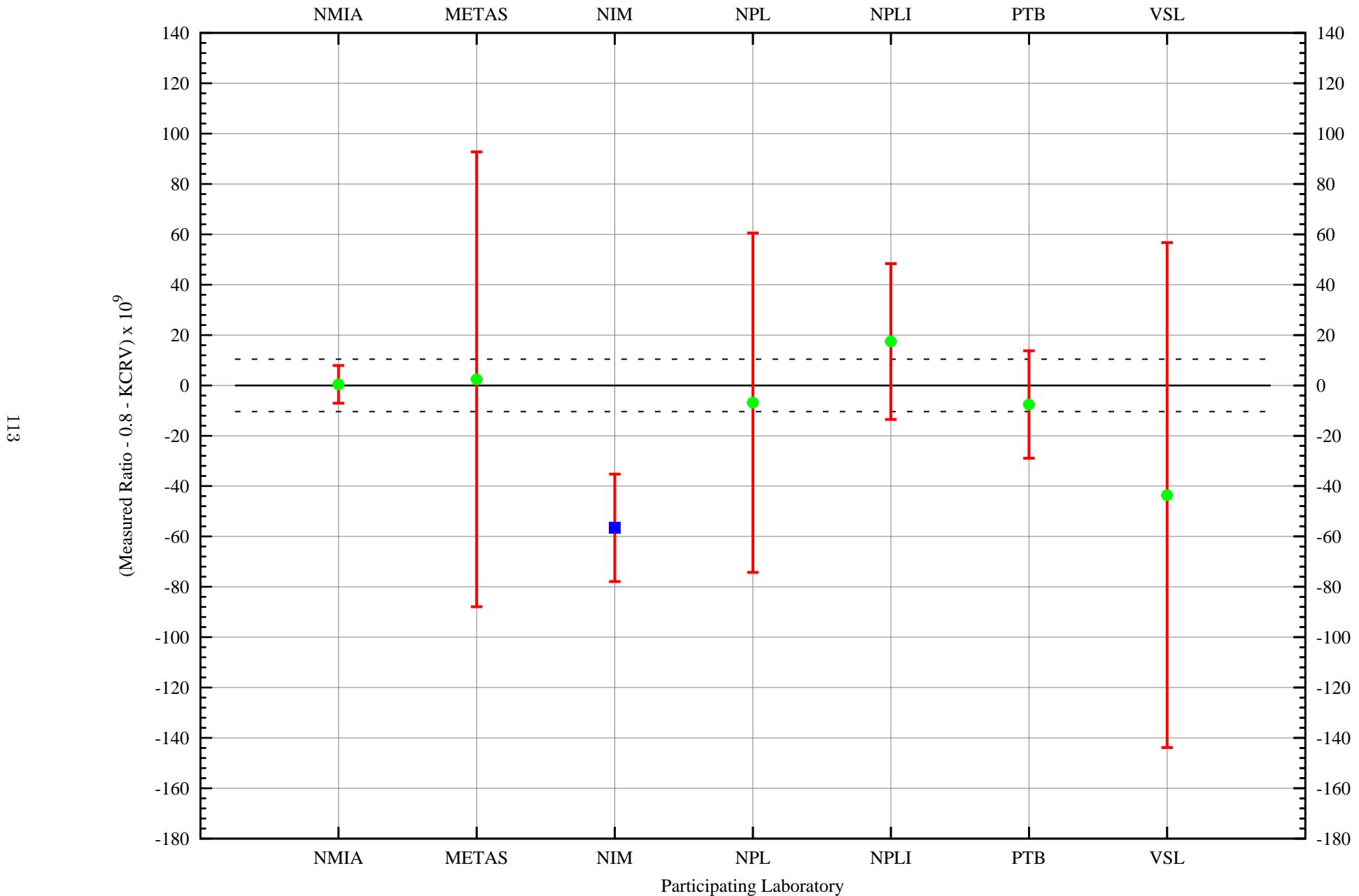
Table 102: Degree of equivalence to the KCRV for the Nominal Ratio 0.8 at 55 Hz, Quadrature Voltage Ratio (nV/V)

NMIA	METAS	NIM	NPL	NPLI	PTB	VSL
0.7 ± 2.0	41 ± 109	−16 ± 16	11 ± 68	−13804 ± 300	12 ± 20	−54 ±1000

Table 103: Laboratory - Laboratory degree of equivalence for the Nominal Ratio 0.8 at 55 Hz, Quadrature Voltage Ratio (nV/V)

	NMIA	METAS	NIM	NPL	NPLI	PTB	VSL
NMIA		−40 ± 109	17 ± 18	−10 ± 69	13805 ± 300	−11 ± 21	55 ±1000
METAS	40 ± 109		57 ± 110	30 ± 128	13845 ± 319	29 ± 111	95 ±1006
NIM	−17 ± 18	−57 ± 110		−27 ± 71	13788 ± 301	−28 ± 27	38 ±1000
NPL	10 ± 69	−30 ± 128	27 ± 71		13815 ± 308	−1 ± 72	65 ±1002
NPLI	−13805 ± 300	−13845 ± 319	−13788 ± 301	−13815 ± 308		−13816 ± 301	−13750 ±1044
PTB	11 ± 21	−29 ± 111	28 ± 27	1 ± 72	13816 ± 301		66 ±1000
VSL	−55 ±1000	−95 ±1006	−38 ±1000	−65 ±1002	13750 ±1044	−66 ±1000	

Nominal Ratio: 0.8 at 55 Hz, Quadrature Voltage Ratio (KCRV $\pm$ 2σ) is (214.3 $\pm$ 4.8) x 10^{-9} of input
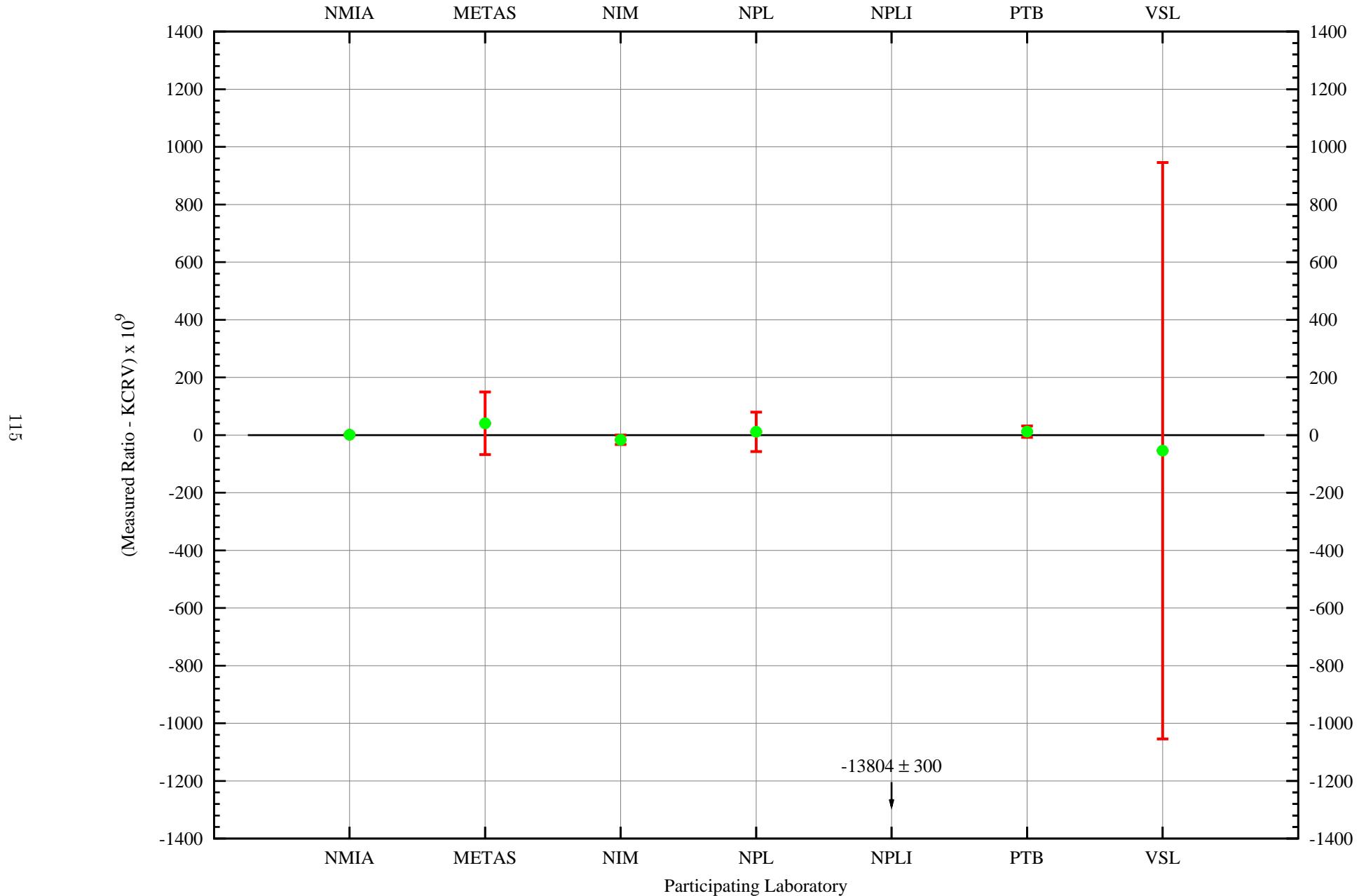
Table 104: Degree of equivalence to the KCRV for the Nominal Ratio 0.7 at 55 Hz, In-Phase Voltage Ratio (nV/V)

NMIA	METAS	NIM	NPL	NPLI	PTB	VSL
5.0 ± 8.3	−3 ± 59	−42 ± 29	−2 ± 67	28 ± 31	−4 ± 22	−41 ± 100

Table 105: Laboratory - Laboratory degree of equivalence for the Nominal Ratio 0.7 at 55 Hz, In-Phase Voltage Ratio (nV/V)

	NMIA	METAS	NIM	NPL	NPLI	PTB	VSL
NMIA		8 ± 61	47 ± 33	7 ± 69	−23 ± 35	9 ± 27	46 ± 102
METAS	−8 ± 61		39 ± 67	−1 ± 91	−31 ± 68	1 ± 64	38 ± 117
NIM	−47 ± 33	−39 ± 67		−40 ± 75	−70 ± 45	−38 ± 39	−1 ± 105
NPL	−7 ± 69	1 ± 91	40 ± 75		−30 ± 76	2 ± 72	39 ± 122
NPLI	23 ± 35	31 ± 68	70 ± 45	30 ± 76		32 ± 40	69 ± 106
PTB	−9 ± 27	−1 ± 64	38 ± 39	−2 ± 72	−32 ± 40		37 ± 104
VSL	−46 ± 102	−38 ± 117	1 ± 105	−39 ± 122	−69 ± 106	−37 ± 104	

Nominal Ratio: 0.7 at 55 Hz, In-Phase Voltage Ratio (KCRV ± 2σ) is (-99.0 ± 9.8) x 10^{-9} of input
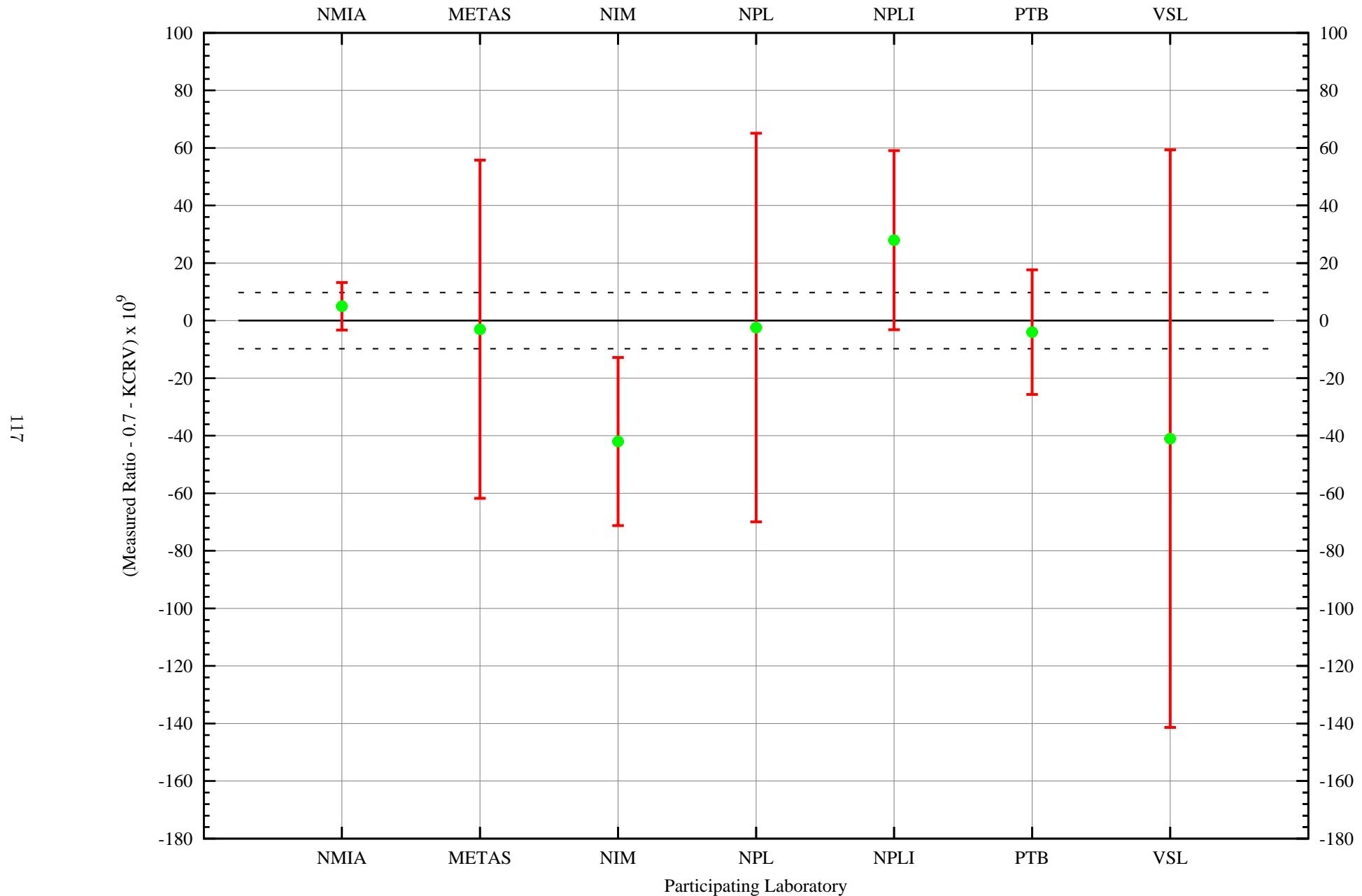
Table 106: Degree of equivalence to the KCRV for the Nominal Ratio 0.7 at 55 Hz, Quadrature Voltage Ratio (nV/V)

NMIA	METAS	NIM	NPL	NPLI	PTB	VSL
1.2 ± 2.0	36 ± 110	−22 ± 16	10 ± 68	−17843 ± 300	12 ± 20	−213 ±1000

Table 107: Laboratory - Laboratory degree of equivalence for the Nominal Ratio 0.7 at 55 Hz, Quadrature Voltage Ratio (nV/V)

	NMIA	METAS	NIM	NPL	NPLI	PTB	VSL
NMIA		−35 ± 110	23 ± 18	−9 ± 69	17844 ± 300	−11 ± 21	214 ±1000
METAS	35 ± 110		58 ± 111	26 ± 129	17879 ± 319	24 ± 112	249 ±1006
NIM	−23 ± 18	−58 ± 111		−32 ± 71	17821 ± 301	−34 ± 27	191 ±1000
NPL	9 ± 69	−26 ± 129	32 ± 71		17853 ± 308	−2 ± 72	223 ±1002
NPLI	−17844 ± 300	−17879 ± 319	−17821 ± 301	−17853 ± 308		−17855 ± 301	−17630 ±1044
PTB	11 ± 21	−24 ± 112	34 ± 27	2 ± 72	17855 ± 301		225 ±1000
VSL	−214 ±1000	−249 ±1006	−191 ±1000	−223 ±1002	17630 ±1044	−225 ±1000	

Nominal Ratio: 0.7 at 55 Hz, Quadrature Voltage Ratio (KCRV $\pm$ 2σ) is (212.8 $\pm$ 4.8) x 10^{-9} of input
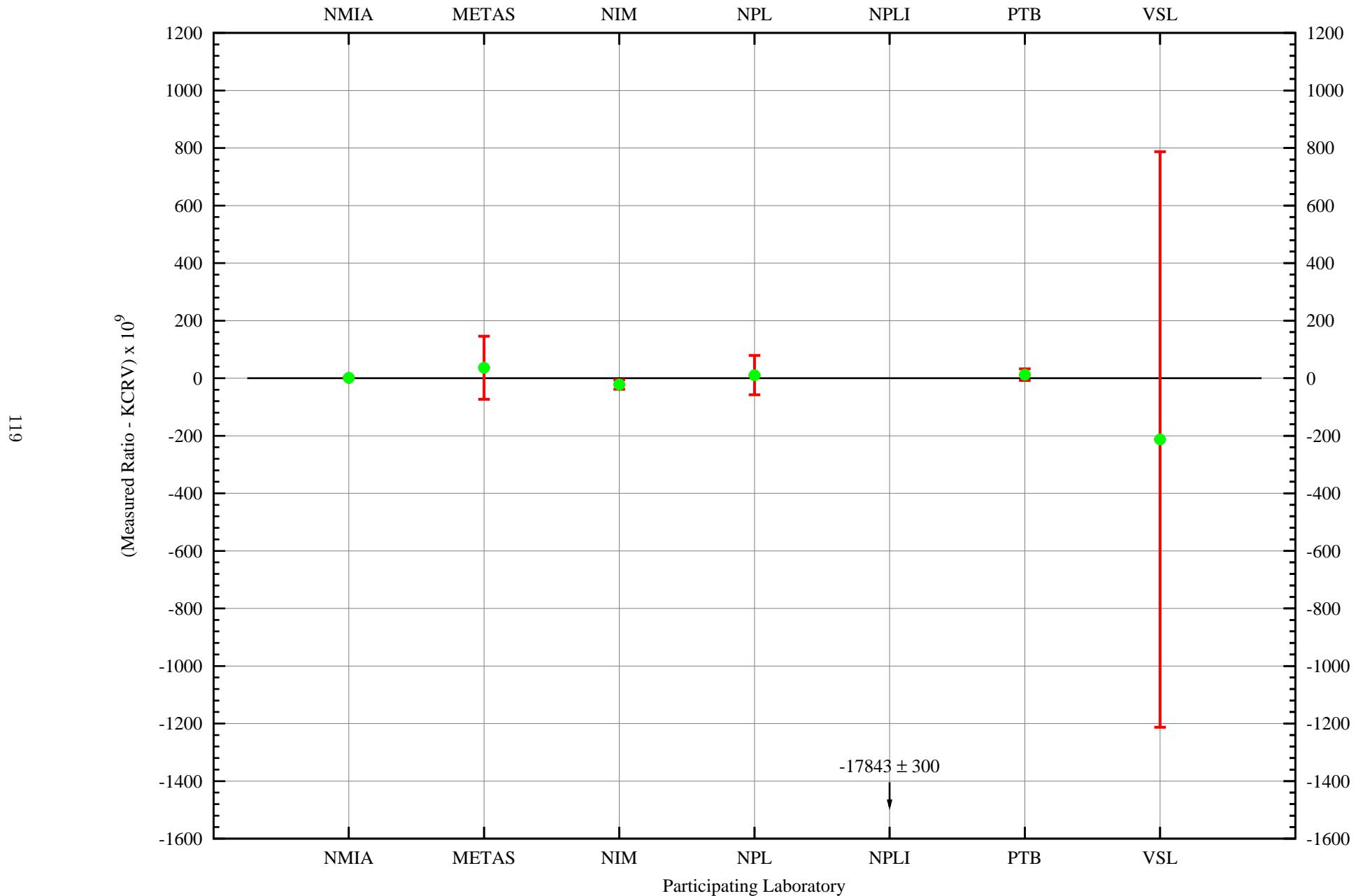
Table 108: Degree of equivalence to the KCRV for the Nominal Ratio 0.6 at 55 Hz, In-Phase Voltage Ratio (nV/V)

NMIA	METAS	NIM	NPL	NPLI	PTB	VSL
-0.7 ± 7.6	-3 ± 62	-63 ± 37	-9 ± 67	36 ± 31	-13 ± 21	-49 ± 100

Table 109: Laboratory - Laboratory degree of equivalence for the Nominal Ratio 0.6 at 55 Hz, In-Phase Voltage Ratio (nV/V)

	NMIA	METAS	NIM	NPL	NPLI	PTB	VSL
NMIA		2 ± 64	62 ± 40	8 ± 69	-37 ± 35	12 ± 27	48 ± 102
METAS	-2 ± 64		60 ± 74	6 ± 93	-39 ± 71	10 ± 67	46 ± 119
NIM	-62 ± 40	-60 ± 74		-54 ± 78	-99 ± 50	-50 ± 45	-14 ± 108
NPL	-8 ± 69	-6 ± 93	54 ± 78		-46 ± 76	4 ± 72	40 ± 122
NPLI	37 ± 35	39 ± 71	99 ± 50	46 ± 76		49 ± 40	85 ± 106
PTB	-12 ± 27	-10 ± 67	50 ± 45	-4 ± 72	-49 ± 40		36 ± 104
VSL	-48 ± 102	-46 ± 119	14 ± 108	-40 ± 122	-85 ± 106	-36 ± 104	

Nominal Ratio: 0.6 at 55 Hz, In-Phase Voltage Ratio (KCRV $\pm$ 2σ) is (-121.3 $\pm$ 10.3) x 10^{-9} of input
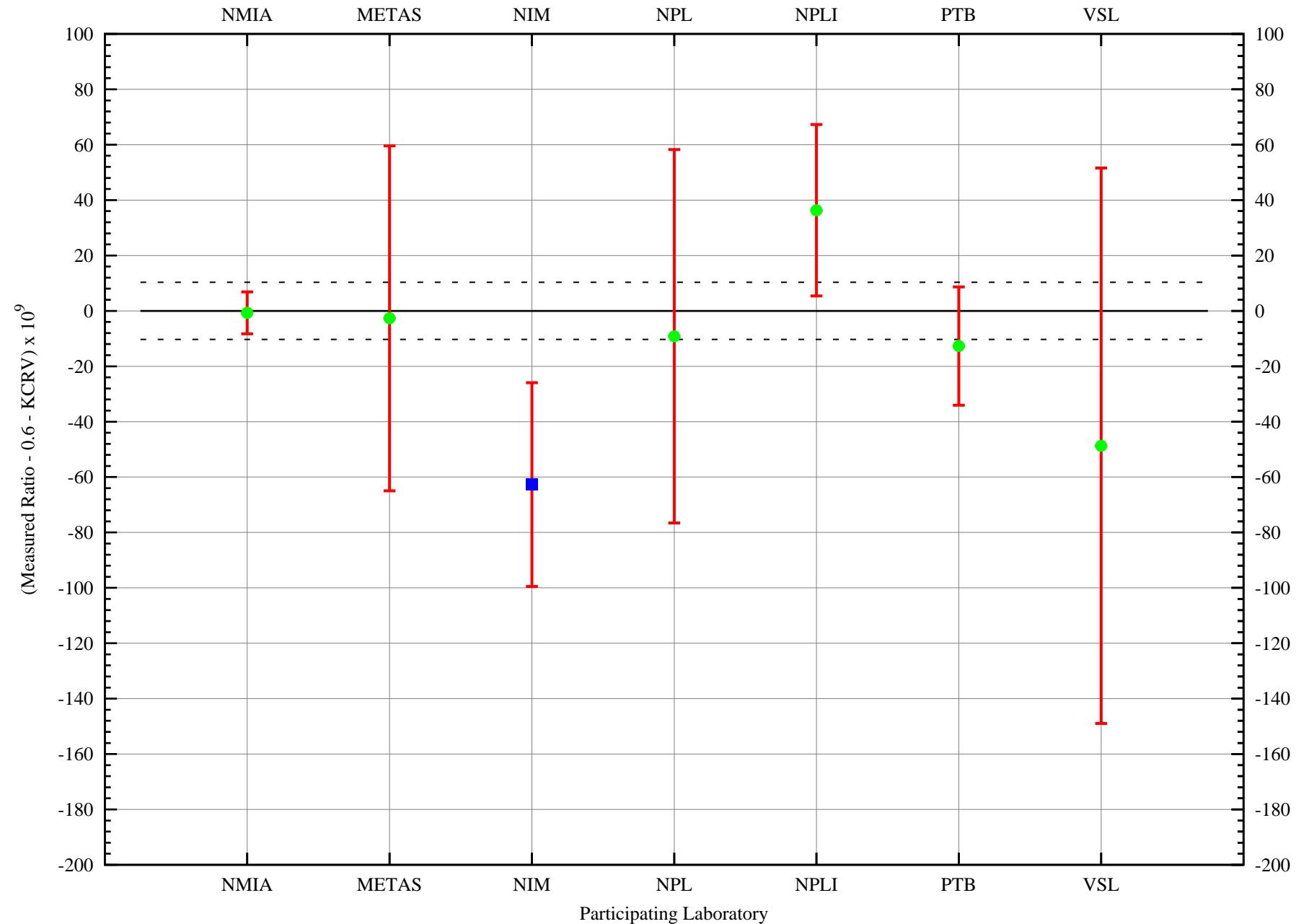
Table 110: Degree of equivalence to the KCRV for the Nominal Ratio 0.6 at 55 Hz, Quadrature Voltage Ratio (nV/V)

NMIA	METAS	NIM	NPL	NPLI	PTB	VSL
−0.9 ± 1.4	43 ± 111	−40 ± 12	11 ± 68	−19706 ± 300	12 ± 20	−196 ±1000

Table 111: Laboratory - Laboratory degree of equivalence for the Nominal Ratio 0.6 at 55 Hz, Quadrature Voltage Ratio (nV/V)

	NMIA	METAS	NIM	NPL	NPLI	PTB	VSL
NMIA		−44 ± 112	39 ± 14	−12 ± 69	19705 ± 300	−13 ± 21	195 ±1000
METAS	44 ± 112		83 ± 112	32 ± 131	19749 ± 320	31 ± 113	239 ±1006
NIM	−39 ± 14	−83 ± 112		−51 ± 70	19666 ± 300	−52 ± 24	156 ±1000
NPL	12 ± 69	−32 ± 131	51 ± 70		19717 ± 308	−1 ± 72	207 ±1002
NPLI	−19705 ± 300	−19749 ± 320	−19666 ± 300	−19717 ± 308		−19718 ± 301	−19510 ±1044
PTB	13 ± 21	−31 ± 113	52 ± 24	1 ± 72	19718 ± 301		208 ±1000
VSL	−195 ±1000	−239 ±1006	−156 ±1000	−207 ±1002	19510 ±1044	−208 ±1000	

Nominal Ratio: 0.6 at 55 Hz, Quadrature Voltage Ratio (KCRV ± 2σ) is (235.9 ± 5.1) x 10^{-9} of input
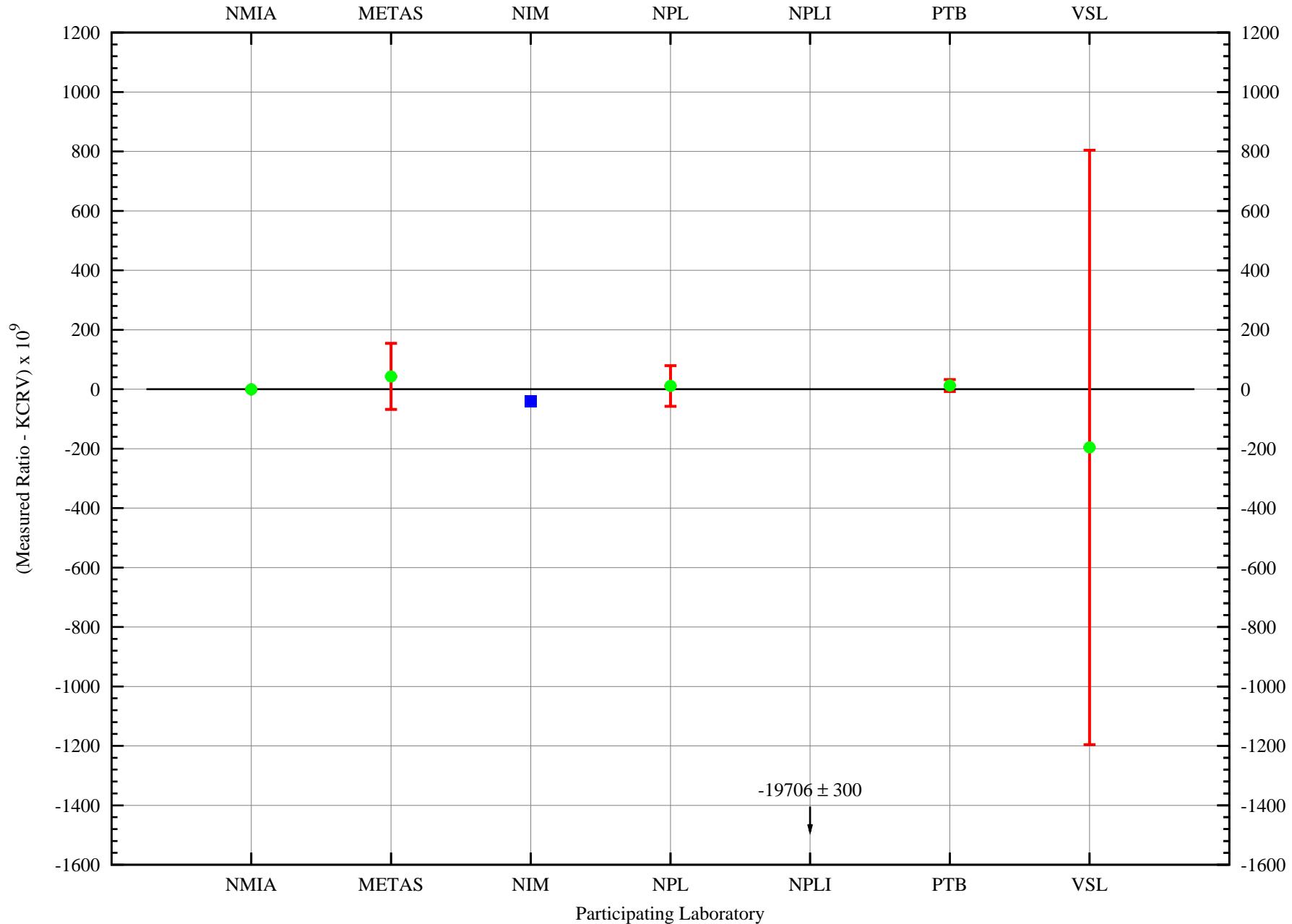
Table 112: Degree of equivalence to the KCRV for the Nominal Ratio 0.5 at 55 Hz, In-Phase Voltage Ratio (nV/V)

NMIA	METAS	NIM	NPL	NPLI	PTB	VSL
0.5 $\pm$ 7.5	$-9 \pm$ 73	$-64 \pm$ 29	$-5 \pm$ 67	24 $\pm$ 31	$-12 \pm$ 21	$-32 \pm$ 100

Table 113: Laboratory - Laboratory degree of equivalence for the Nominal Ratio 0.5 at 55 Hz, In-Phase Voltage Ratio (nV/V)

	NMIA	METAS	NIM	NPL	NPLI	PTB	VSL
NMIA		9 $\pm$ 75	64 $\pm$ 33	5 $\pm$ 69	$-24 \pm$ 35	12 $\pm$ 27	32 $\pm$ 102
METAS	$-9 \pm$ 75		55 $\pm$ 80	$-4 \pm$ 101	$-33 \pm$ 81	3 $\pm$ 78	23 $\pm$ 125
NIM	$-64 \pm$ 33	$-55 \pm$ 80		$-59 \pm$ 75	$-88 \pm$ 45	$-52 \pm$ 39	$-32 \pm$ 105
NPL	$-5 \pm$ 69	4 $\pm$ 101	59 $\pm$ 75		$-29 \pm$ 76	7 $\pm$ 72	27 $\pm$ 122
NPLI	24 $\pm$ 35	33 $\pm$ 81	88 $\pm$ 45	29 $\pm$ 76		36 $\pm$ 40	56 $\pm$ 106
PTB	$-12 \pm$ 27	$-3 \pm$ 78	52 $\pm$ 39	$-7 \pm$ 72	$-36 \pm$ 40		20 $\pm$ 104
VSL	$-32 \pm$ 102	$-23 \pm$ 125	32 $\pm$ 105	$-27 \pm$ 122	$-56 \pm$ 106	$-20 \pm$ 104	

Nominal Ratio: 0.5 at 55 Hz, In-Phase Voltage Ratio (KCRV $\pm$ 2σ) is (-108.5 $\pm$ 10.4) x 10^{-9} of input

125
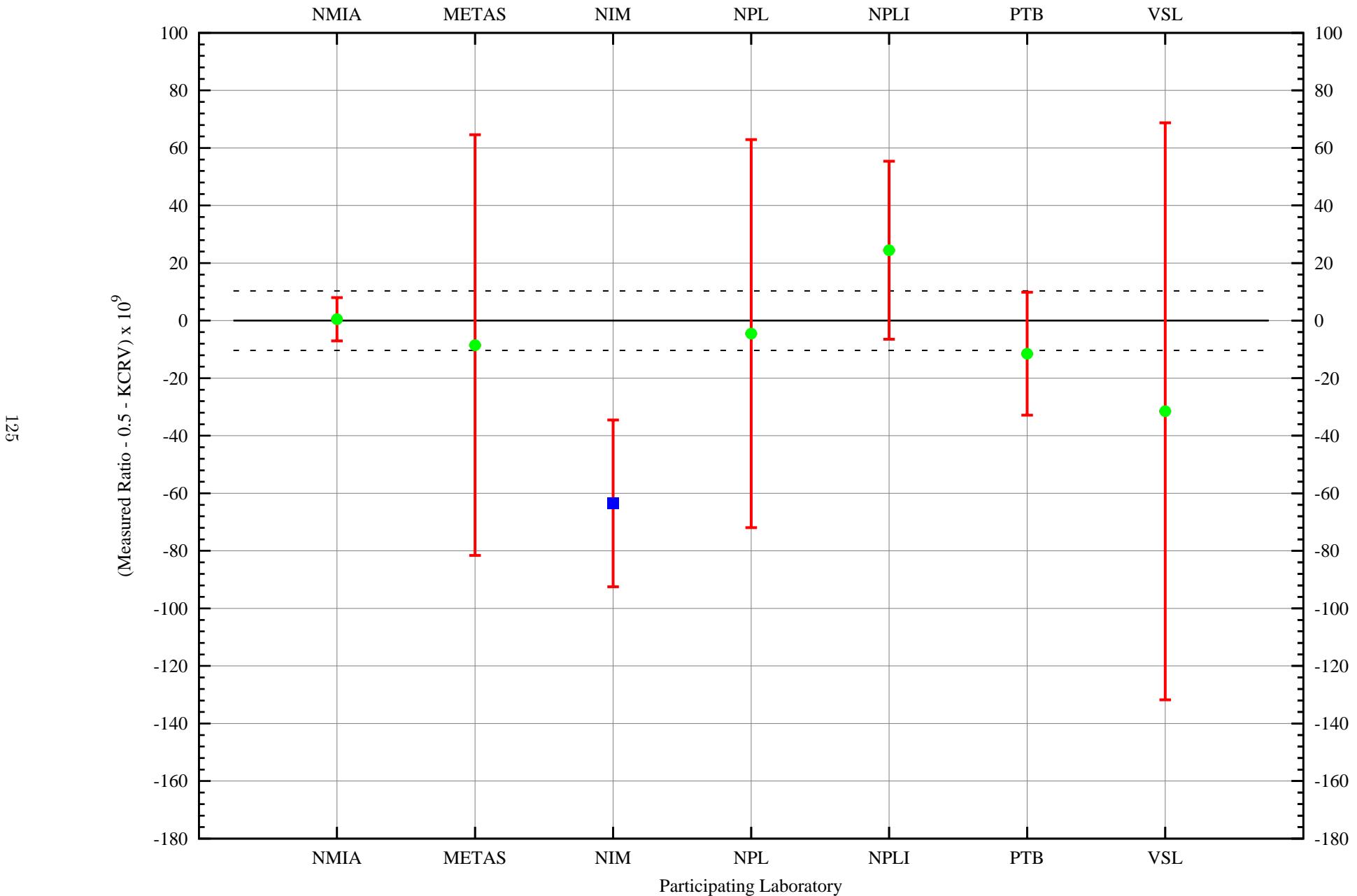
Table 114: Degree of equivalence to the KCRV for the Nominal Ratio 0.5 at 55 Hz, Quadrature Voltage Ratio (nV/V)

NMIA	METAS	NIM	NPL	NPLI	PTB	VSL
−0.2 ± 1.7	28 ± 120	−11 ± 24	9 ± 68	−19800 ± 300	10 ± 20	−370 ±1000

Table 115: Laboratory - Laboratory degree of equivalence for the Nominal Ratio 0.5 at 55 Hz, Quadrature Voltage Ratio (nV/V)

	NMIA	METAS	NIM	NPL	NPLI	PTB	VSL
NMIA		−28 ± 120	11 ± 25	−9 ± 69	19800 ± 300	−10 ± 21	370 ±1000
METAS	28 ± 120		39 ± 123	19 ± 138	19828 ± 323	18 ± 122	398 ±1007
NIM	−11 ± 25	−39 ± 123		−20 ± 73	19789 ± 301	−21 ± 32	359 ±1000
NPL	9 ± 69	−19 ± 138	20 ± 73		19809 ± 308	−1 ± 72	379 ±1002
NPLI	−19800 ± 300	−19828 ± 323	−19789 ± 301	−19809 ± 308		−19810 ± 301	−19430 ±1044
PTB	10 ± 21	−18 ± 122	21 ± 32	1 ± 72	19810 ± 301		380 ±1000
VSL	−370 ±1000	−398 ±1007	−359 ±1000	−379 ±1002	19430 ±1044	−380 ±1000	

Nominal Ratio: 0.5 at 55 Hz, Quadrature Voltage Ratio (KCRV ± 2σ) is (200.2 ± 4.9) x 10^{-9} of input
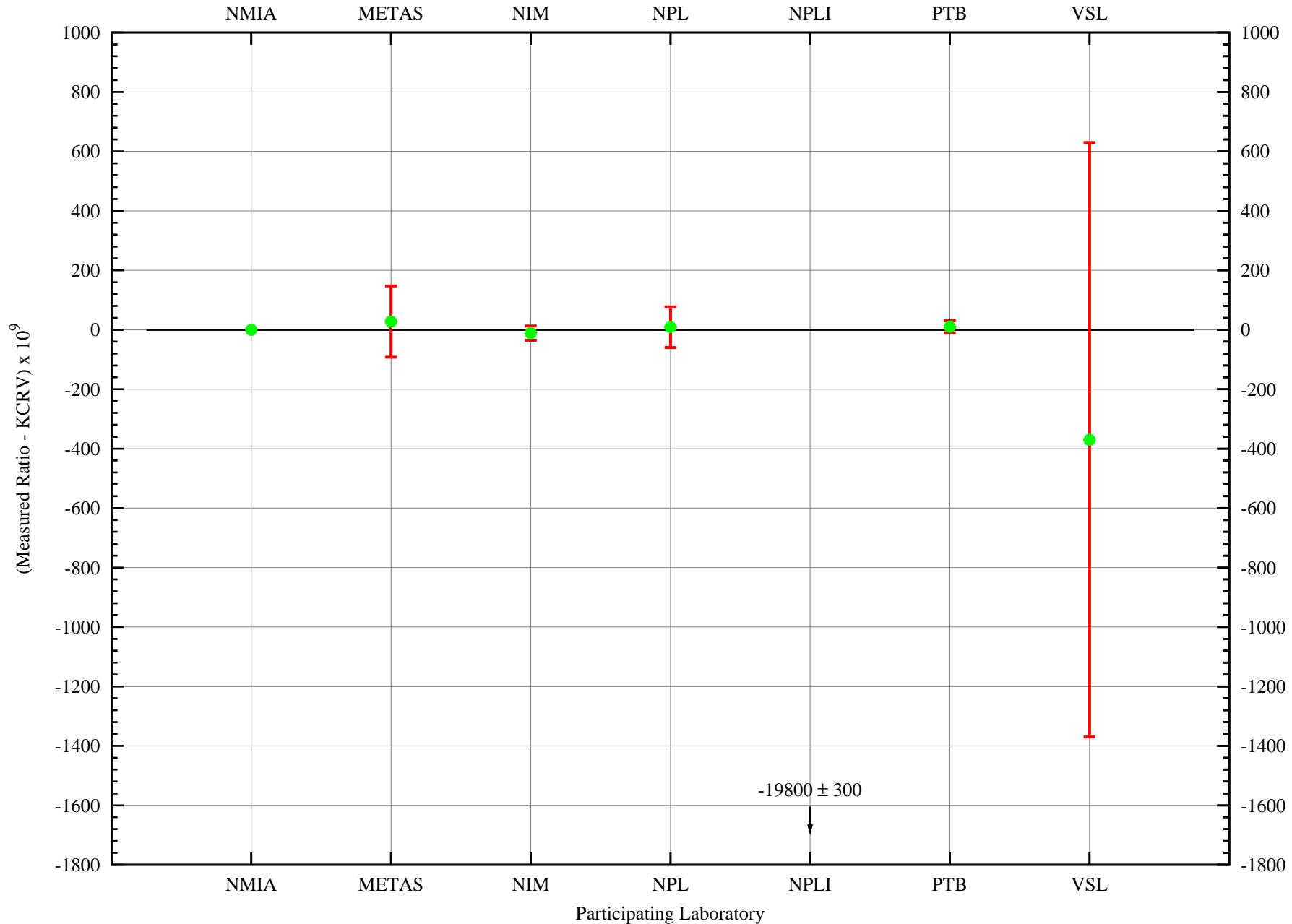
Table 116: Degree of equivalence to the KCRV for the Nominal Ratio 0.4 at 55 Hz, In-Phase Voltage Ratio (nV/V)

NMIA	METAS	NIM	NPL	NPLI	PTB	VSL
4.1 ± 8.4	−1 ± 70	−27 ± 25	2 ± 68	30 ± 31	−8 ± 22	−35 ± 100

Table 117: Laboratory - Laboratory degree of equivalence for the Nominal Ratio 0.4 at 55 Hz, In-Phase Voltage Ratio (nV/V)

	NMIA	METAS	NIM	NPL	NPLI	PTB	VSL
NMIA		5 ± 72	31 ± 30	2 ± 69	−26 ± 35	12 ± 27	39 ± 102
METAS	−5 ± 72		26 ± 76	−3 ± 99	−31 ± 78	7 ± 75	34 ± 123
NIM	−31 ± 30	−26 ± 76		−29 ± 73	−57 ± 42	−19 ± 36	8 ± 104
NPL	−2 ± 69	3 ± 99	29 ± 73		−28 ± 76	10 ± 72	37 ± 122
NPLI	26 ± 35	31 ± 78	57 ± 42	28 ± 76		38 ± 40	65 ± 106
PTB	−12 ± 27	−7 ± 75	19 ± 36	−10 ± 72	−38 ± 40		27 ± 104
VSL	−39 ± 102	−34 ± 123	−8 ± 104	−37 ± 122	−65 ± 106	−27 ± 104	

Nominal Ratio: 0.4 at 55 Hz, In-Phase Voltage Ratio (KCRV $\pm$ 2σ) is (-155.1 $\pm$ 9.7) x 10^{-9} of input
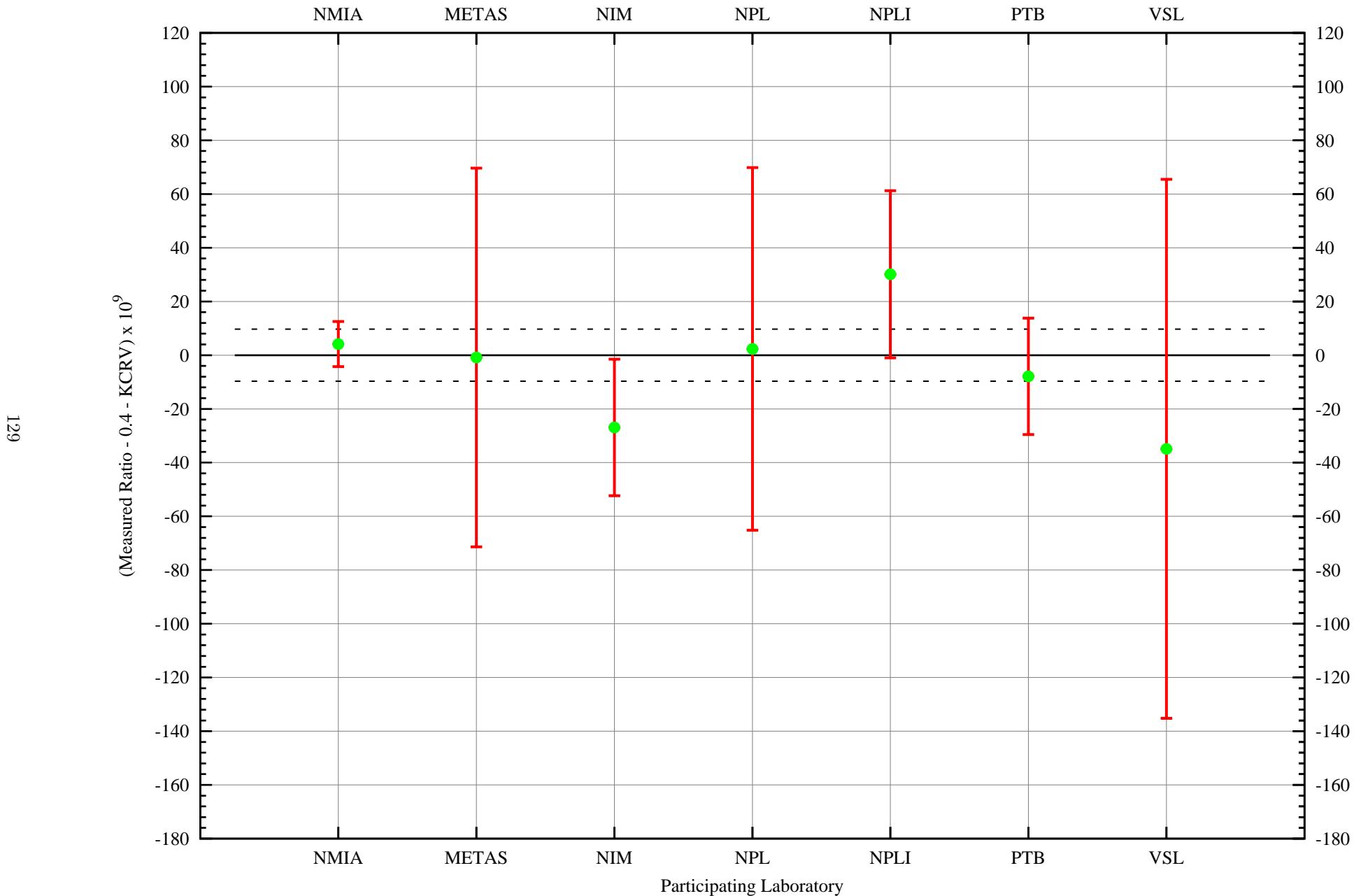
Table 118: Degree of equivalence to the KCRV for the Nominal Ratio 0.4 at 55 Hz, Quadrature Voltage Ratio (nV/V)

NMIA	METAS	NIM	NPL	NPLI	PTB	VSL
0.3 ± 1.7	34 ± 116	−28 ± 24	10 ± 68	−17716 ± 300	13 ± 20	−296 ±1000

Table 119: Laboratory - Laboratory degree of equivalence for the Nominal Ratio 0.4 at 55 Hz, Quadrature Voltage Ratio (nV/V)

	NMIA	METAS	NIM	NPL	NPLI	PTB	VSL
NMIA		−34 ± 116	28 ± 25	−9 ± 69	17716 ± 300	−13 ± 21	296 ±1000
METAS	34 ± 116		62 ± 119	25 ± 135	17750 ± 322	21 ± 118	330 ±1007
NIM	−28 ± 25	−62 ± 119		−37 ± 73	17688 ± 301	−41 ± 32	268 ±1000
NPL	9 ± 69	−25 ± 135	37 ± 73		17725 ± 308	−4 ± 72	305 ±1002
NPLI	−17716 ± 300	−17750 ± 322	−17688 ± 301	−17725 ± 308		−17729 ± 301	−17420 ±1044
PTB	13 ± 21	−21 ± 118	41 ± 32	4 ± 72	17729 ± 301		309 ±1000
VSL	−296 ±1000	−330 ±1007	−268 ±1000	−305 ±1002	17420 ±1044	−309 ±1000	

Nominal Ratio: 0.4 at 55 Hz, Quadrature Voltage Ratio (KCRV $\pm$ 2σ) is (165.7 $\pm$ 4.9) x 10^{-9} of input
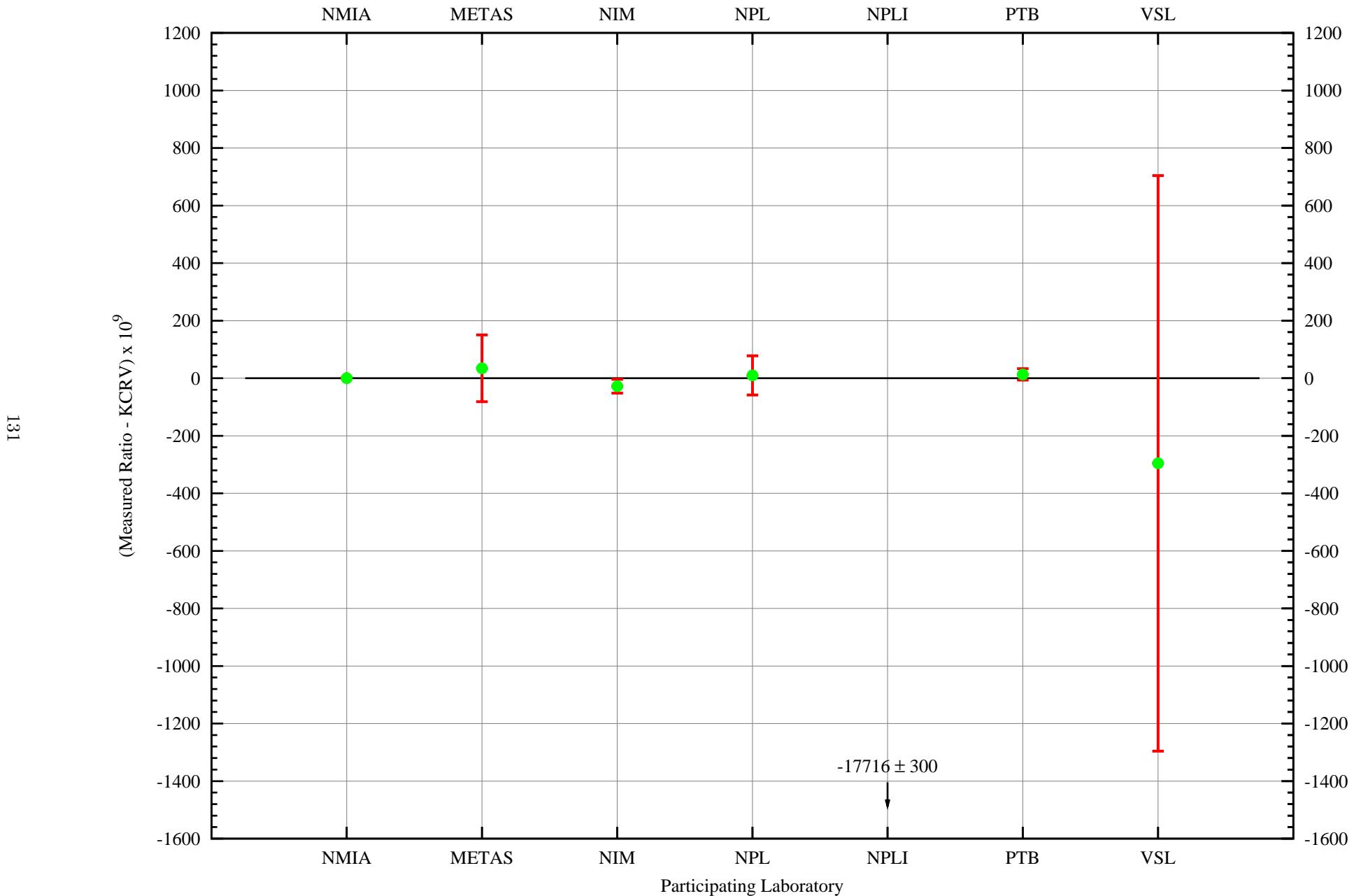
Table 120: Degree of equivalence to the KCRV for the Nominal Ratio 0.3 at 55 Hz, In-Phase Voltage Ratio (nV/V)

NMIA	METAS	NIM	NPL	NPLI	PTB	VSL
−0.7 ± 7.6	−2 ± 63	−50 ± 18	−2 ± 67	34 ± 31	−13 ± 21	−46 ± 100

Table 121: Laboratory - Laboratory degree of equivalence for the Nominal Ratio 0.3 at 55 Hz, In-Phase Voltage Ratio (nV/V)

	NMIA	METAS	NIM	NPL	NPLI	PTB	VSL
NMIA		1 ± 65	49 ± 24	2 ± 69	−35 ± 35	12 ± 27	45 ± 102
METAS	−1 ± 65		48 ± 67	1 ± 94	−36 ± 72	11 ± 68	44 ± 119
NIM	−49 ± 24	−48 ± 67		−47 ± 71	−84 ± 39	−37 ± 31	−4 ± 103
NPL	−2 ± 69	−1 ± 94	47 ± 71		−37 ± 76	10 ± 72	43 ± 122
NPLI	35 ± 35	36 ± 72	84 ± 39	37 ± 76		47 ± 40	80 ± 106
PTB	−12 ± 27	−11 ± 68	37 ± 31	−10 ± 72	−47 ± 40		33 ± 104
VSL	−45 ± 102	−44 ± 119	4 ± 103	−43 ± 122	−80 ± 106	−33 ± 104	

Nominal Ratio: 0.3 at 55 Hz, In-Phase Voltage Ratio (KCRV $\pm$ 2σ) is (-164.3 $\pm$ 10.3) x 10^{-9} of input
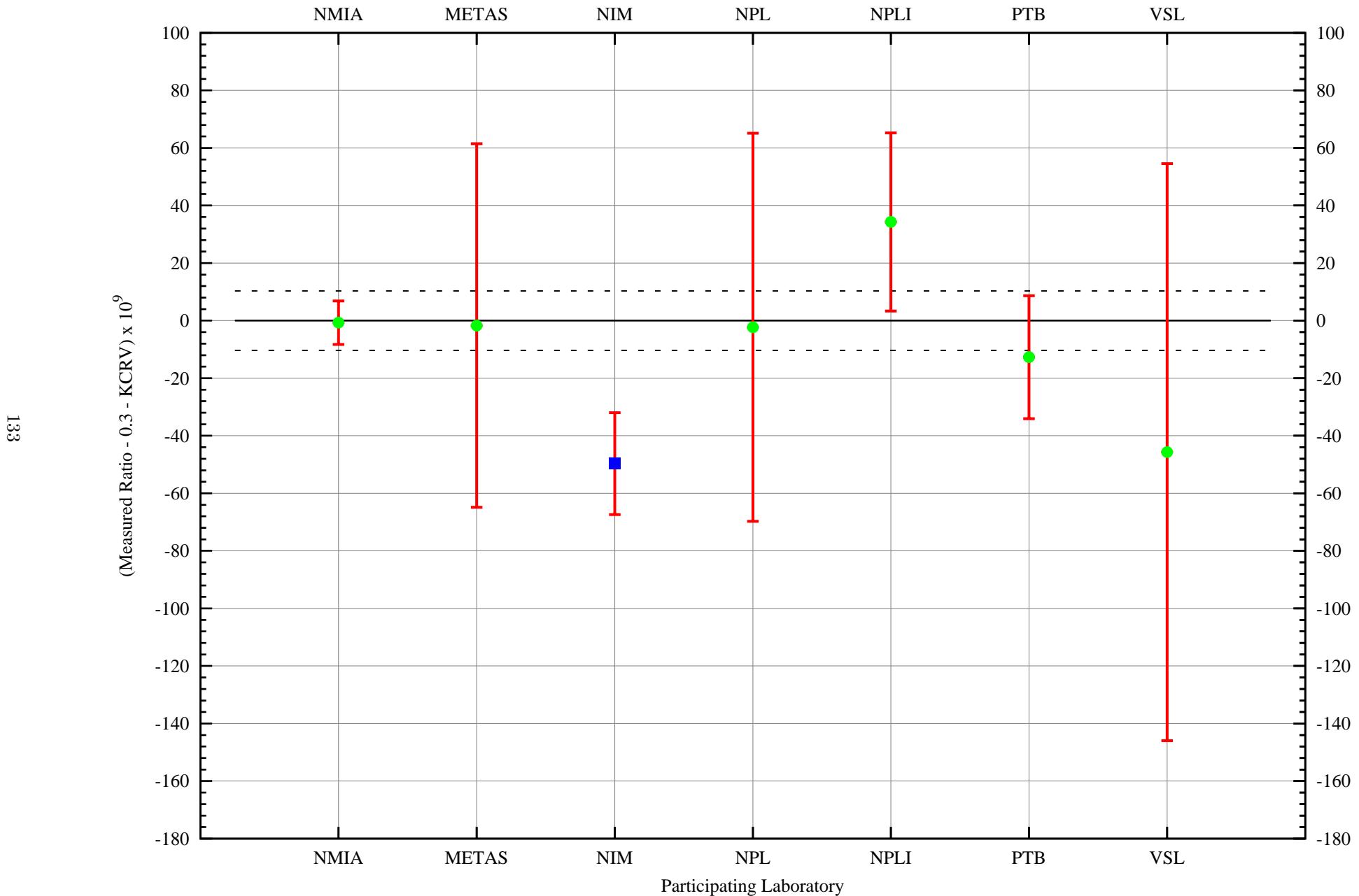
Table 122: Degree of equivalence to the KCRV for the Nominal Ratio 0.3 at 55 Hz, Quadrature Voltage Ratio (nV/V)

NMIA	METAS	NIM	NPL	NPLI	PTB	VSL
−0.9 ± 1.3	37 ± 112	−46 ± 20	7 ± 68	−14637 ± 300	13 ± 20	−217 ±1000

Table 123: Laboratory - Laboratory degree of equivalence for the Nominal Ratio 0.3 at 55 Hz, Quadrature Voltage Ratio (nV/V)

	NMIA	METAS	NIM	NPL	NPLI	PTB	VSL
NMIA		−38 ± 113	45 ± 21	−8 ± 69	14636 ± 300	−14 ± 21	216 ±1000
METAS	38 ± 113		83 ± 114	30 ± 132	14674 ± 320	24 ± 114	254 ±1006
NIM	−45 ± 21	−83 ± 114		−53 ± 72	14591 ± 301	−59 ± 29	171 ±1000
NPL	8 ± 69	−30 ± 132	53 ± 72		14644 ± 308	−6 ± 72	224 ±1002
NPLI	−14636 ± 300	−14674 ± 320	−14591 ± 301	−14644 ± 308		−14650 ± 301	−14420 ±1044
PTB	14 ± 21	−24 ± 114	59 ± 29	6 ± 72	14650 ± 301		230 ±1000
VSL	−216 ±1000	−254 ±1006	−171 ±1000	−224 ±1002	14420 ±1044	−230 ±1000	

Nominal Ratio: 0.3 at 55 Hz, Quadrature Voltage Ratio (KCRV $\pm$ 2σ) is (176.9 $\pm$ 5.0) x 10^{-9} of input

-14637 ± 300

(Measured Ratio - KCRV) x 10^9

Participating Laboratory
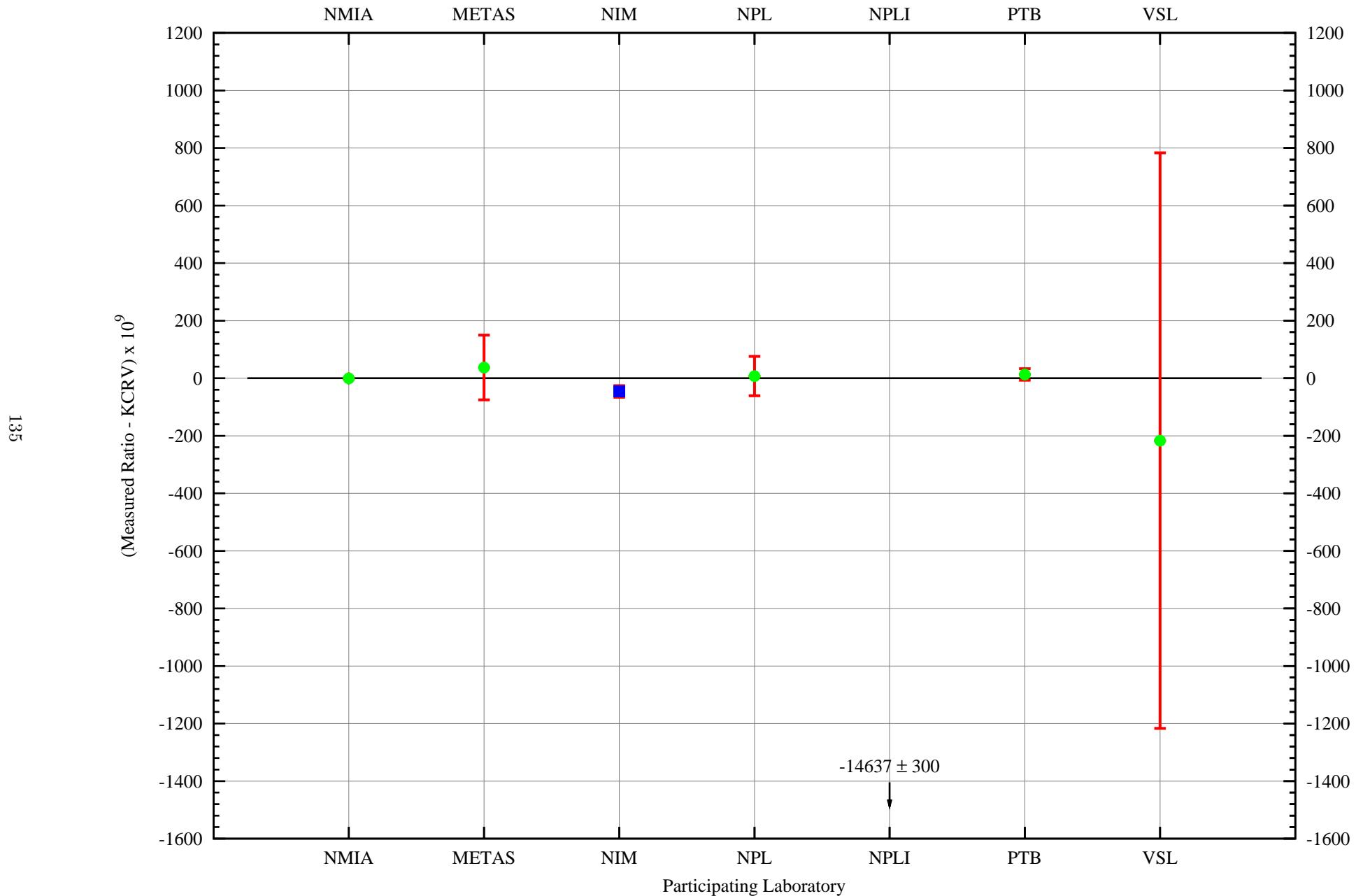
Table 124: Degree of equivalence to the KCRV for the Nominal Ratio 0.2 at 55 Hz, In-Phase Voltage Ratio (nV/V)

NMIA	METAS	NIM	NPL	NPLI	PTB	VSL
-0.9 ± 7.6	1 ± 57	-44 ± 18	-1 ± 67	28 ± 31	-10 ± 21	-33 ± 100

Table 125: Laboratory - Laboratory degree of equivalence for the Nominal Ratio 0.2 at 55 Hz, In-Phase Voltage Ratio (nV/V)

	NMIA	METAS	NIM	NPL	NPLI	PTB	VSL
NMIA		-2 ± 59	43 ± 24	-0 ± 69	-29 ± 35	9 ± 27	32 ± 102
METAS	2 ± 59		45 ± 61	2 ± 89	-27 ± 66	11 ± 62	34 ± 116
NIM	-43 ± 24	-45 ± 61		-43 ± 71	-72 ± 39	-34 ± 31	-11 ± 103
NPL	0 ± 69	-2 ± 89	43 ± 71		-29 ± 76	9 ± 72	32 ± 122
NPLI	29 ± 35	27 ± 66	72 ± 39	29 ± 76		38 ± 40	61 ± 106
PTB	-9 ± 27	-11 ± 62	34 ± 31	-9 ± 72	-38 ± 40		23 ± 104
VSL	-32 ± 102	-34 ± 116	11 ± 103	-32 ± 122	-61 ± 106	-23 ± 104	

Nominal Ratio: 0.2 at 55 Hz, In-Phase Voltage Ratio (KCRV $\pm$ 2σ) is (-147.1 $\pm$ 10.3) x 10^{-9} of input
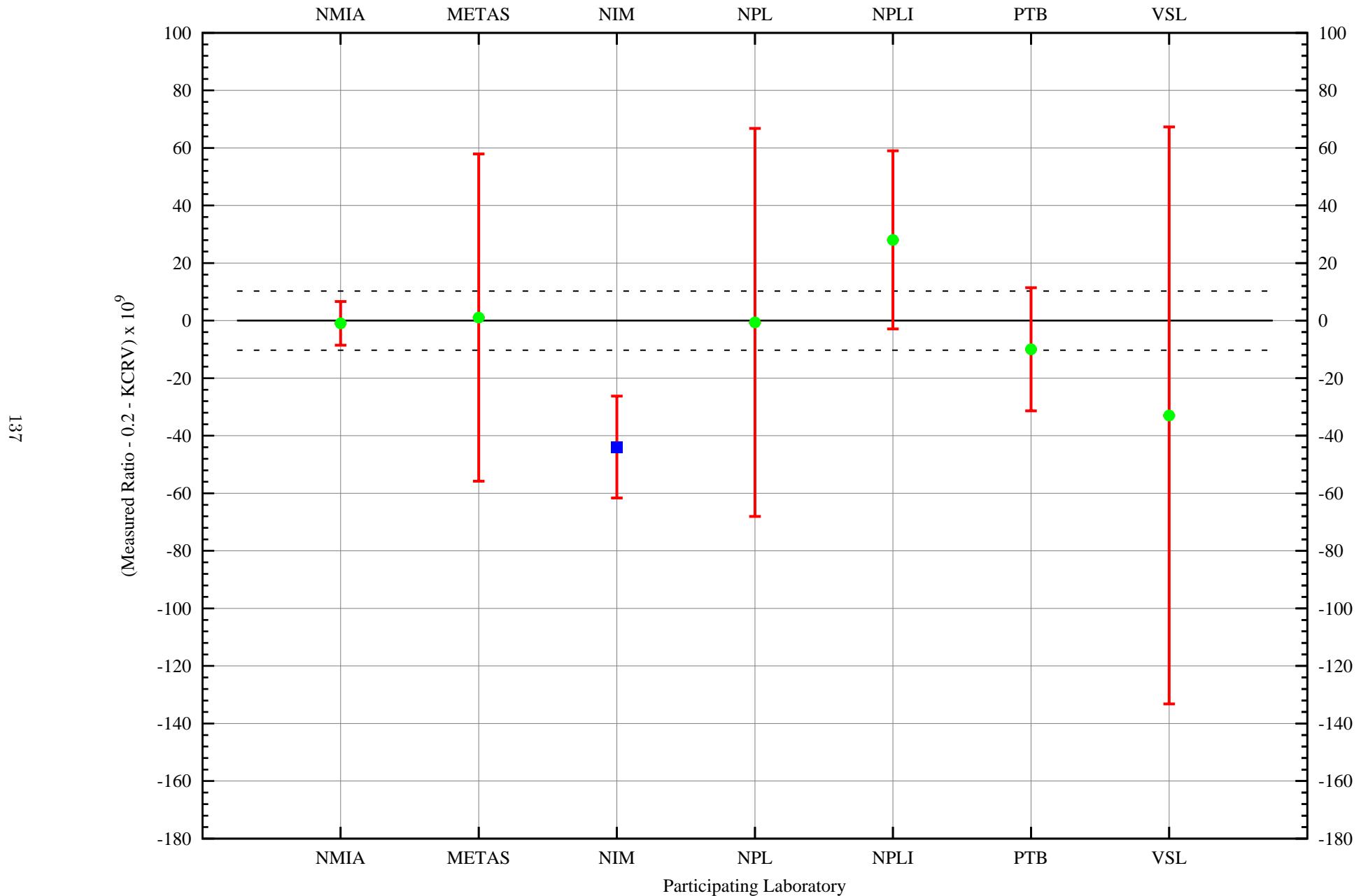
Table 126: Degree of equivalence to the KCRV for the Nominal Ratio 0.2 at 55 Hz, Quadrature Voltage Ratio (nV/V)

NMIA	METAS	NIM	NPL	NPLI	PTB	VSL
−0.8 ± 1.4	32 ± 105	−41 ± 12	7 ± 68	−10644 ± 300	11 ± 20	−114 ±1000

Table 127: Laboratory - Laboratory degree of equivalence for the Nominal Ratio 0.2 at 55 Hz, Quadrature Voltage Ratio (nV/V)

	NMIA	METAS	NIM	NPL	NPLI	PTB	VSL
NMIA		−33 ± 105	40 ± 14	−8 ± 69	10643 ± 300	−12 ± 21	113 ±1000
METAS	33 ± 105		73 ± 106	25 ± 125	10676 ± 318	21 ± 107	146 ±1005
NIM	−40 ± 14	−73 ± 106		−48 ± 70	10603 ± 300	−52 ± 24	73 ±1000
NPL	8 ± 69	−25 ± 125	48 ± 70		10651 ± 308	−4 ± 72	121 ±1002
NPLI	−10643 ± 300	−10676 ± 318	−10603 ± 300	−10651 ± 308		−10655 ± 301	−10530 ±1044
PTB	12 ± 21	−21 ± 107	52 ± 24	4 ± 72	10655 ± 301		125 ±1000
VSL	−113 ±1000	−146 ±1005	−73 ±1000	−121 ±1002	10530 ±1044	−125 ±1000	

Nominal Ratio: 0.2 at 55 Hz, Quadrature Voltage Ratio (KCRV $\pm 2\sigma$) is (153.8 $\pm$ 5.0) x 10^{-9} of input
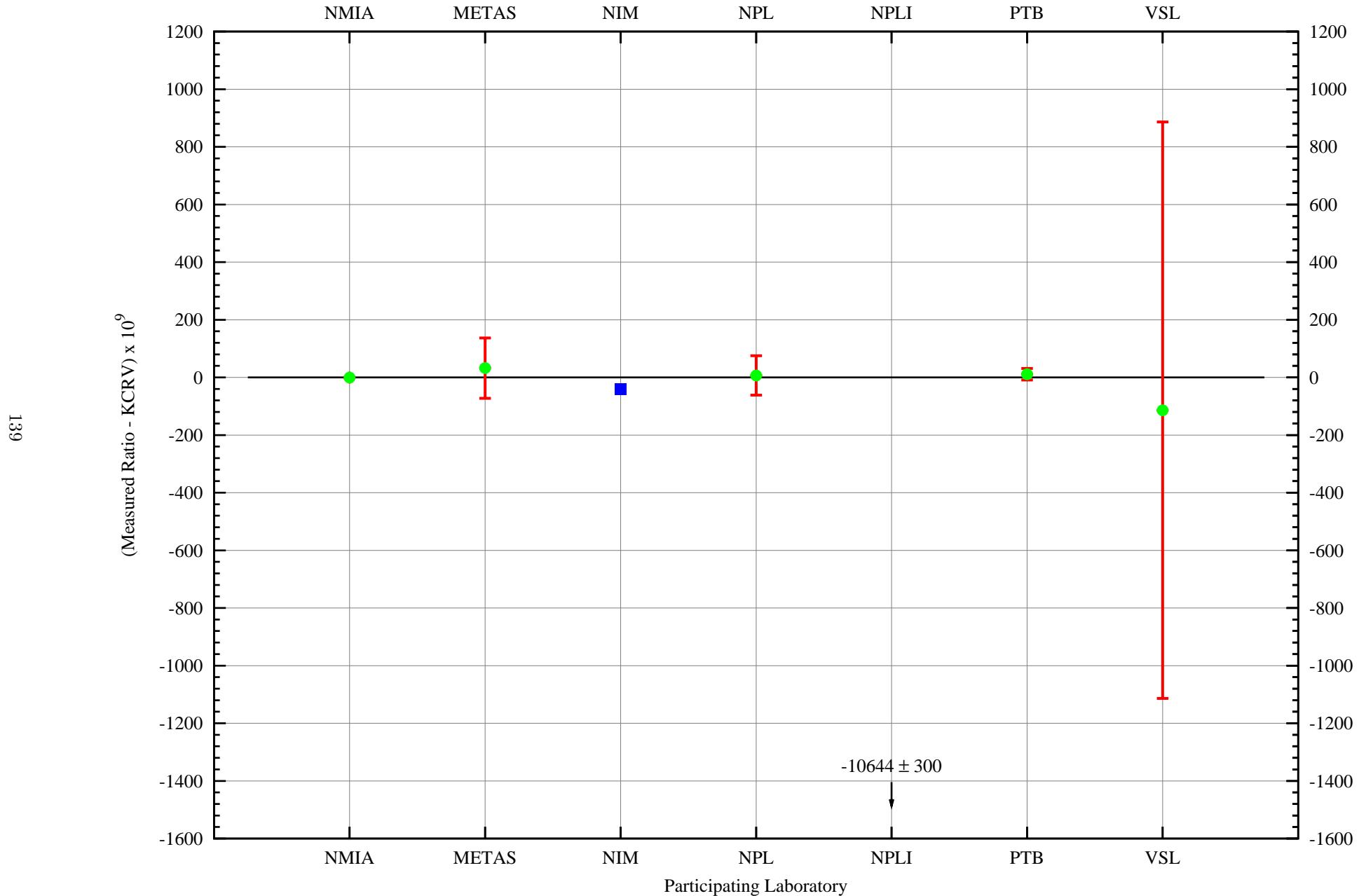
Table 128: Degree of equivalence to the KCRV for the Nominal Ratio 0.1 at 55 Hz, In-Phase Voltage Ratio (nV/V)

NMIA	METAS	NIM	NPL	NPLI	PTB	VSL
5.2 ± 8.9	6 ± 49	−26 ± 18	3 ± 68	34 ± 31	−2 ± 22	−29 ± 100

Table 129: Laboratory - Laboratory degree of equivalence for the Nominal Ratio 0.1 at 55 Hz, In-Phase Voltage Ratio (nV/V)

	NMIA	METAS	NIM	NPL	NPLI	PTB	VSL
NMIA		−1 ± 51	31 ± 24	2 ± 69	−29 ± 35	7 ± 27	34 ± 102
METAS	1 ± 51		32 ± 54	3 ± 84	−28 ± 60	8 ± 55	35 ± 112
NIM	−31 ± 24	−32 ± 54		−29 ± 71	−60 ± 39	−24 ± 31	3 ± 103
NPL	−2 ± 69	−3 ± 84	29 ± 71		−31 ± 76	5 ± 72	32 ± 122
NPLI	29 ± 35	28 ± 60	60 ± 39	31 ± 76		36 ± 40	63 ± 106
PTB	−7 ± 27	−8 ± 55	24 ± 31	−5 ± 72	−36 ± 40		27 ± 104
VSL	−34 ± 102	−35 ± 112	−3 ± 103	−32 ± 122	−63 ± 106	−27 ± 104	

Nominal Ratio: 0.1 at 55 Hz, In-Phase Voltage Ratio (KCRV $\pm\, 2\sigma$) is (-131.2 $\pm$ 9.2) x 10^{-9} of input
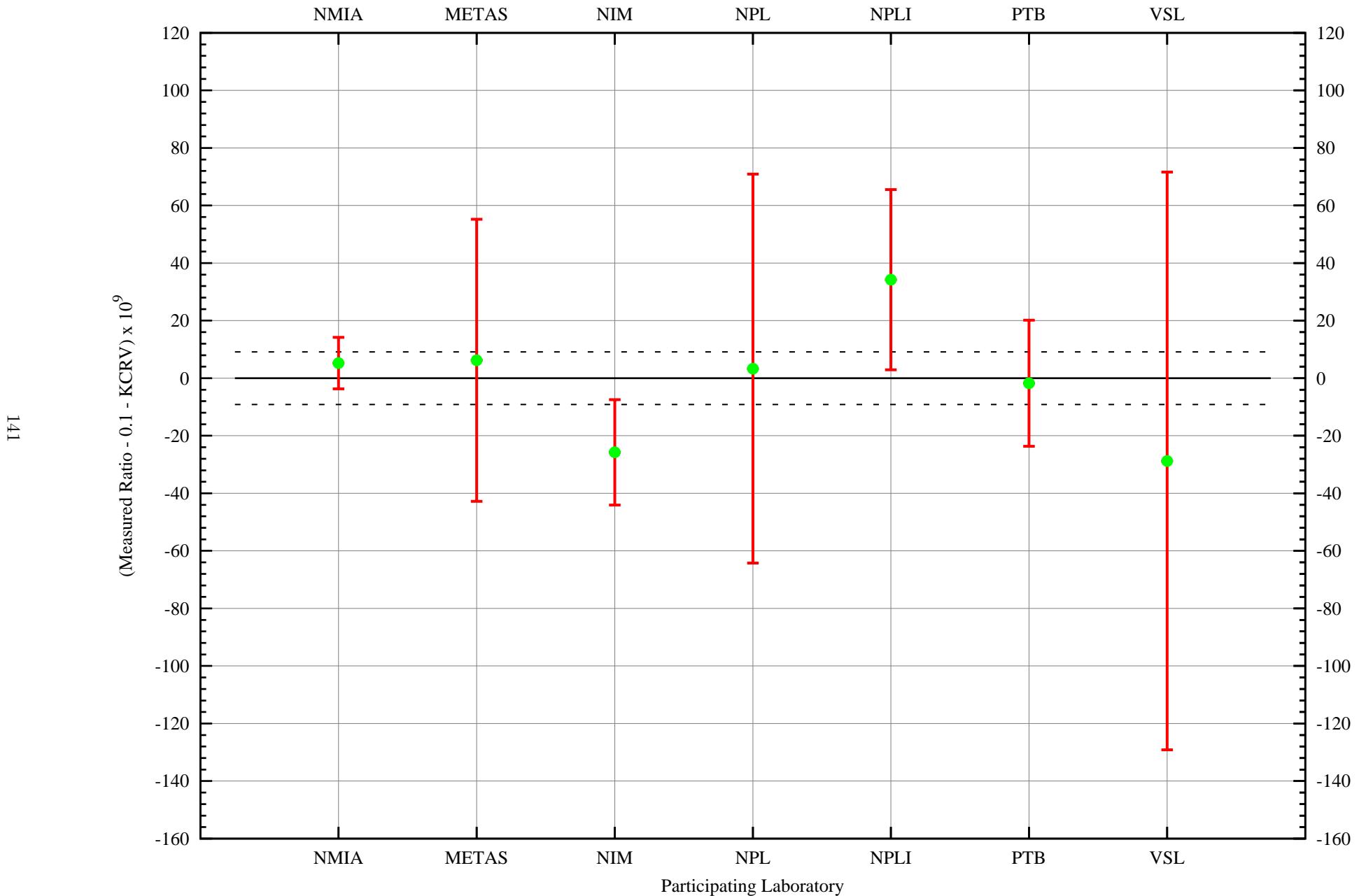
Table 130: Degree of equivalence to the KCRV for the Nominal Ratio 0.1 at 55 Hz, Quadrature Voltage Ratio (nV/V)

NMIA	METAS	NIM	NPL	NPLI	PTB	VSL
-0.8 ± 1.4	26 ± 92	-45 ± 16	6 ± 68	-5539 ± 300	10 ± 20	-19 ± 1000

Table 131: Laboratory - Laboratory degree of equivalence for the Nominal Ratio 0.1 at 55 Hz, Quadrature Voltage Ratio (nV/V)

	NMIA	METAS	NIM	NPL	NPLI	PTB	VSL
NMIA		-27 ± 92	44 ± 18	-6 ± 69	5538 ± 300	-11 ± 21	18 ± 1000
METAS	27 ± 92		71 ± 93	20 ± 115	5565 ± 314	16 ± 94	45 ± 1004
NIM	-44 ± 18	-71 ± 93		-50 ± 71	5494 ± 301	-55 ± 27	-26 ± 1000
NPL	6 ± 69	-20 ± 115	50 ± 71		5544 ± 308	-4 ± 72	24 ± 1002
NPLI	-5538 ± 300	-5565 ± 314	-5494 ± 301	-5544 ± 308		-5549 ± 301	-5520 ± 1044
PTB	11 ± 21	-16 ± 94	55 ± 27	4 ± 72	5549 ± 301		29 ± 1000
VSL	-18 ± 1000	-45 ± 1004	26 ± 1000	-24 ± 1002	5520 ± 1044	-29 ± 1000	

Nominal Ratio: 0.1 at 55 Hz, Quadrature Voltage Ratio (KCRV $\pm$ 2σ) is (128.8 $\pm$ 5.0) x 10^{-9} of input
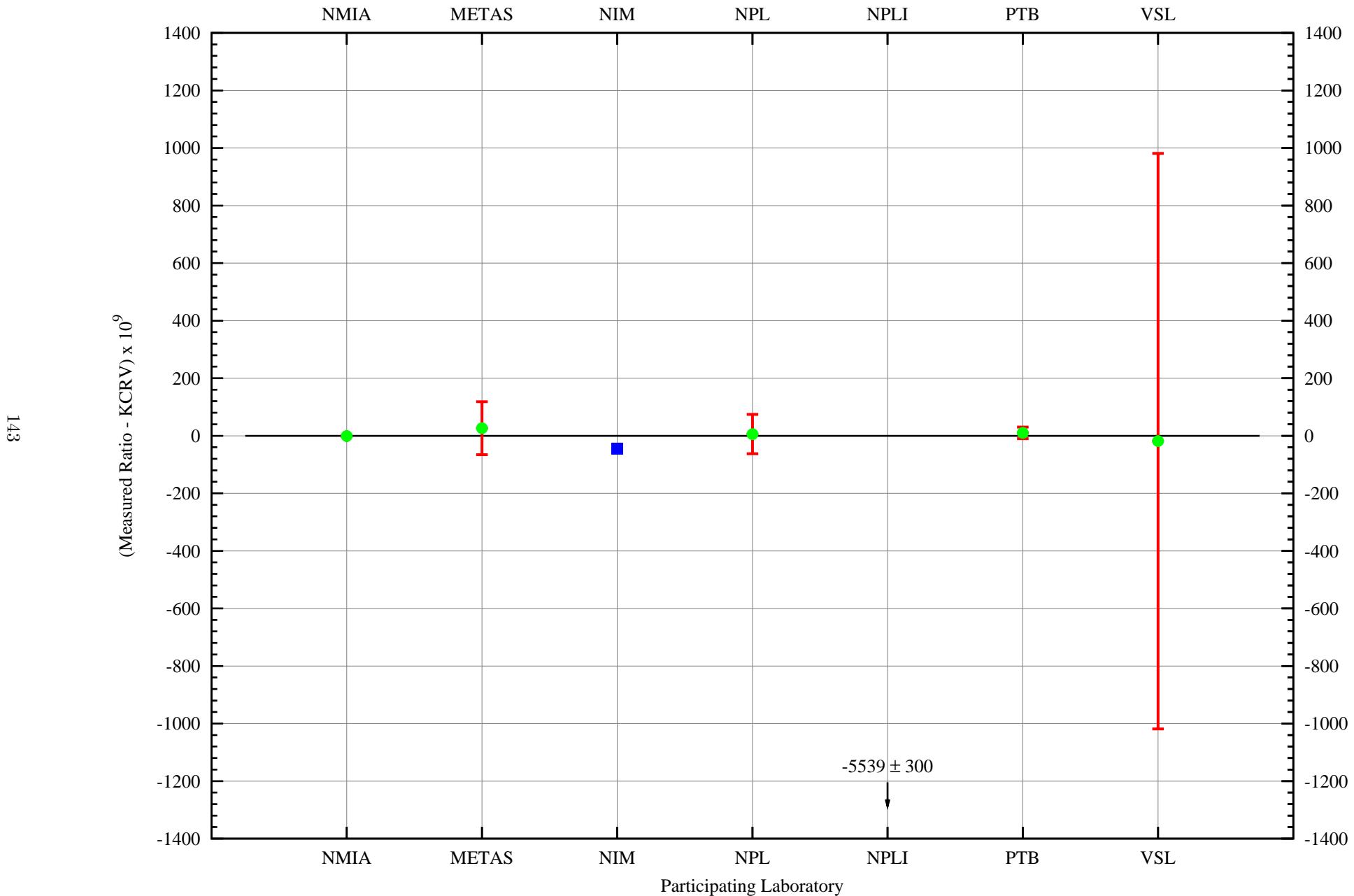
Table 132: Degree of equivalence to the KCRV for the Nominal Ratio 0.01 at 55 Hz, In-Phase Voltage Ratio (nV/V)

NMIA	METAS	NIM	NPL	NPLI	PTB	VSL
0.6 ± 2.7	−23 ± 85	−516 ± 20	115 ± 142	1578 ± 30	−59 ± 100	−185 ±2000

Table 133: Laboratory - Laboratory degree of equivalence for the Nominal Ratio 0.01 at 55 Hz, In-Phase Voltage Ratio (nV/V)

	NMIA	METAS	NIM	NPL	NPLI	PTB	VSL
NMIA		24 ± 87	517 ± 27	−114 ± 143	−1577 ± 35	60 ± 102	186 ±2000
METAS	−24 ± 87		493 ± 89	−138 ± 166	−1601 ± 92	36 ± 133	162 ±2002
NIM	−517 ± 27	−493 ± 89		−631 ± 144	−2094 ± 40	−457 ± 104	−331 ±2000
NPL	114 ± 143	138 ± 166	631 ± 144		−1463 ± 146	174 ± 174	300 ±2005
NPLI	1577 ± 35	1601 ± 92	2094 ± 40	1463 ± 146		1637 ± 106	1763 ±2000
PTB	−60 ± 102	−36 ± 133	457 ± 104	−174 ± 174	−1637 ± 106		126 ±2003
VSL	−186 ±2000	−162 ±2002	331 ±2000	−300 ±2005	−1763 ±2000	−126 ±2003	

Nominal Ratio: 0.01 at 55 Hz, In-Phase Voltage Ratio (KCRV $\pm 2\sigma$) is (-3814.6 $\pm$ 12.6) x 10^{-9} of input
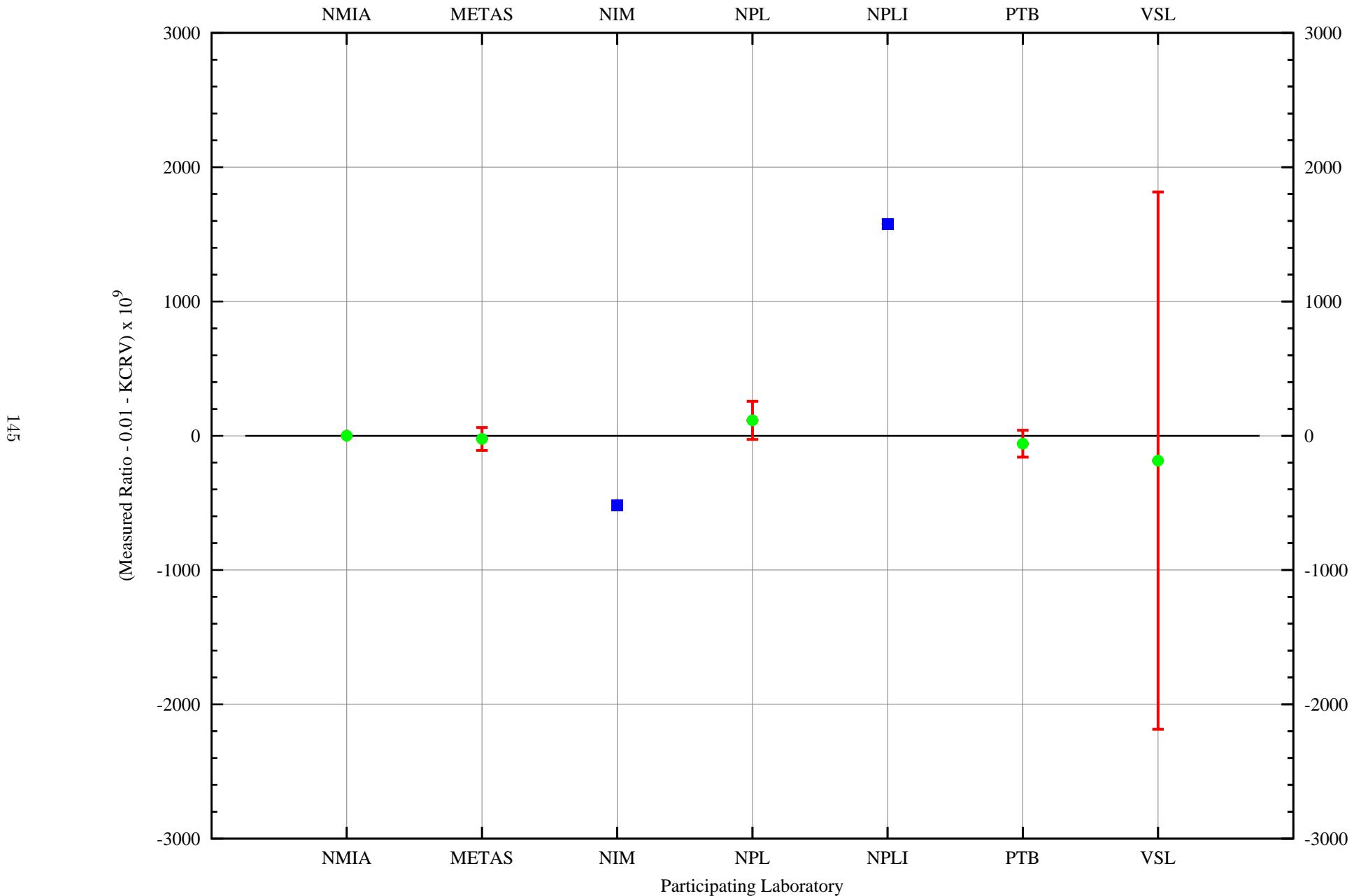
Table 134: Degree of equivalence to the KCRV for the Nominal Ratio 0.01 at 55 Hz, Quadrature Voltage Ratio (nV/V)

NMIA	METAS	NIM	NPL	NPLI	PTB	VSL
1.2 $\pm$ 2.4	129 $\pm$ 185	$-2393 \pm$ 13	$-169 \pm$ 143	$-459 \pm$ 300	317 $\pm$ 199	-249 ± 5000

Table 135: Laboratory - Laboratory degree of equivalence for the Nominal Ratio 0.01 at 55 Hz, Quadrature Voltage Ratio (nV/V)

	NMIA	METAS	NIM	NPL	NPLI	PTB	VSL
NMIA		$-128 \pm$ 186	2394 $\pm$ 26	170 $\pm$ 145	460 $\pm$ 300	$-316 \pm$ 201	250 ±5000
METAS	128 $\pm$ 186		2522 $\pm$ 186	298 $\pm$ 234	588 $\pm$ 353	$-188 \pm$ 273	378 ±5003
NIM	$-2394 \pm$ 26	$-2522 \pm$ 186		$-2224 \pm$ 145	$-1934 \pm$ 301	$-2710 \pm$ 201	-2144 ± 5000
NPL	$-170 \pm$ 145	$-298 \pm$ 234	2224 $\pm$ 145		290 $\pm$ 333	$-486 \pm$ 246	80 ±5002
NPLI	$-460 \pm$ 300	$-588 \pm$ 353	1934 $\pm$ 301	$-290 \pm$ 333		$-776 \pm$ 361	-210 ± 5009
PTB	316 $\pm$ 201	188 $\pm$ 273	2710 $\pm$ 201	486 $\pm$ 246	776 $\pm$ 361		566 ±5004
VSL	-250 ± 5000	-378 ± 5003	2144 ±5000	-80 ± 5002	210 ±5009	-566 ± 5004	

Nominal Ratio: 0.01 at 55 Hz, Quadrature Voltage Ratio (KCRV $\pm$ 2σ) is (3848.8 $\pm$ 16.3) x 10^{-9} of input
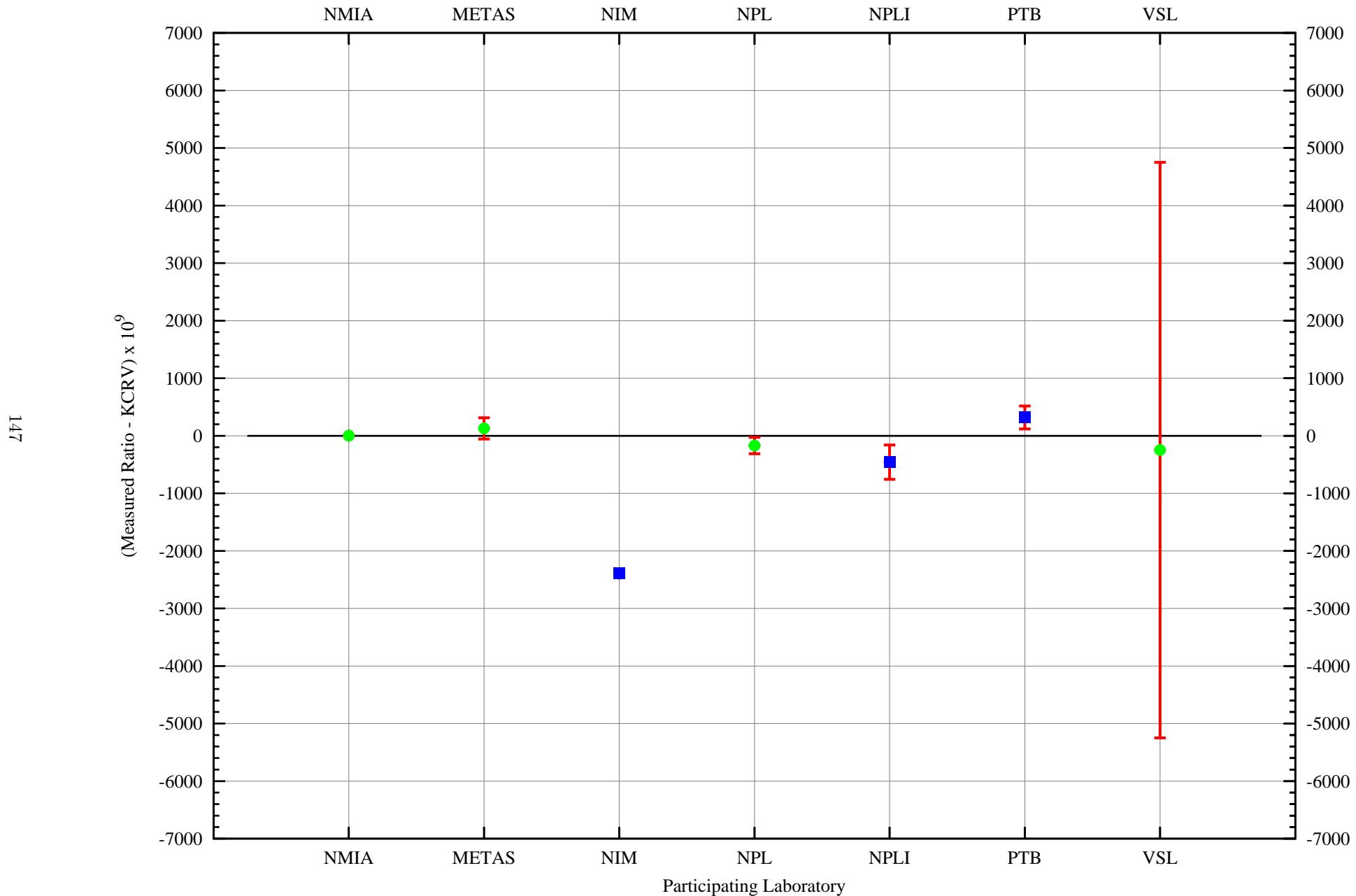
Table 136: Degree of equivalence to the KCRV for the Nominal Ratio 10/11 at 55 Hz, In-Phase Voltage Ratio (nV/V)

NMIA	METAS	NIM	NPL	NPLI	PTB	VSL
−0.5 ± 6.9	−9 ± 43	80 ± 11	3 ± 67	−163 ± 50	4 ± 21	22 ± 200

Table 137: Laboratory - Laboratory degree of equivalence for the Nominal Ratio 10/11 at 55 Hz, In-Phase Voltage Ratio (nV/V)

	NMIA	METAS	NIM	NPL	NPLI	PTB	VSL
NMIA		9 ± 46	−80 ± 20	−4 ± 69	163 ± 53	−4 ± 27	−22 ± 201
METAS	−9 ± 46		−89 ± 47	−13 ± 81	154 ± 68	−13 ± 50	−31 ± 205
NIM	80 ± 20	89 ± 47		76 ± 70	243 ± 54	76 ± 28	58 ± 201
NPL	4 ± 69	13 ± 81	−76 ± 70		167 ± 86	−0 ± 72	−18 ± 212
NPLI	−163 ± 53	−154 ± 68	−243 ± 54	−167 ± 86		−167 ± 57	−185 ± 207
PTB	4 ± 27	13 ± 50	−76 ± 28	0 ± 72	167 ± 57		−18 ± 202
VSL	22 ± 201	31 ± 205	−58 ± 201	18 ± 212	185 ± 207	18 ± 202	

Nominal Ratio: 10/11 at 55 Hz, In-Phase Voltage Ratio (KCRV $\pm$ 2σ) is (129.4 $\pm$ 10.8) x 10^{-9} of input
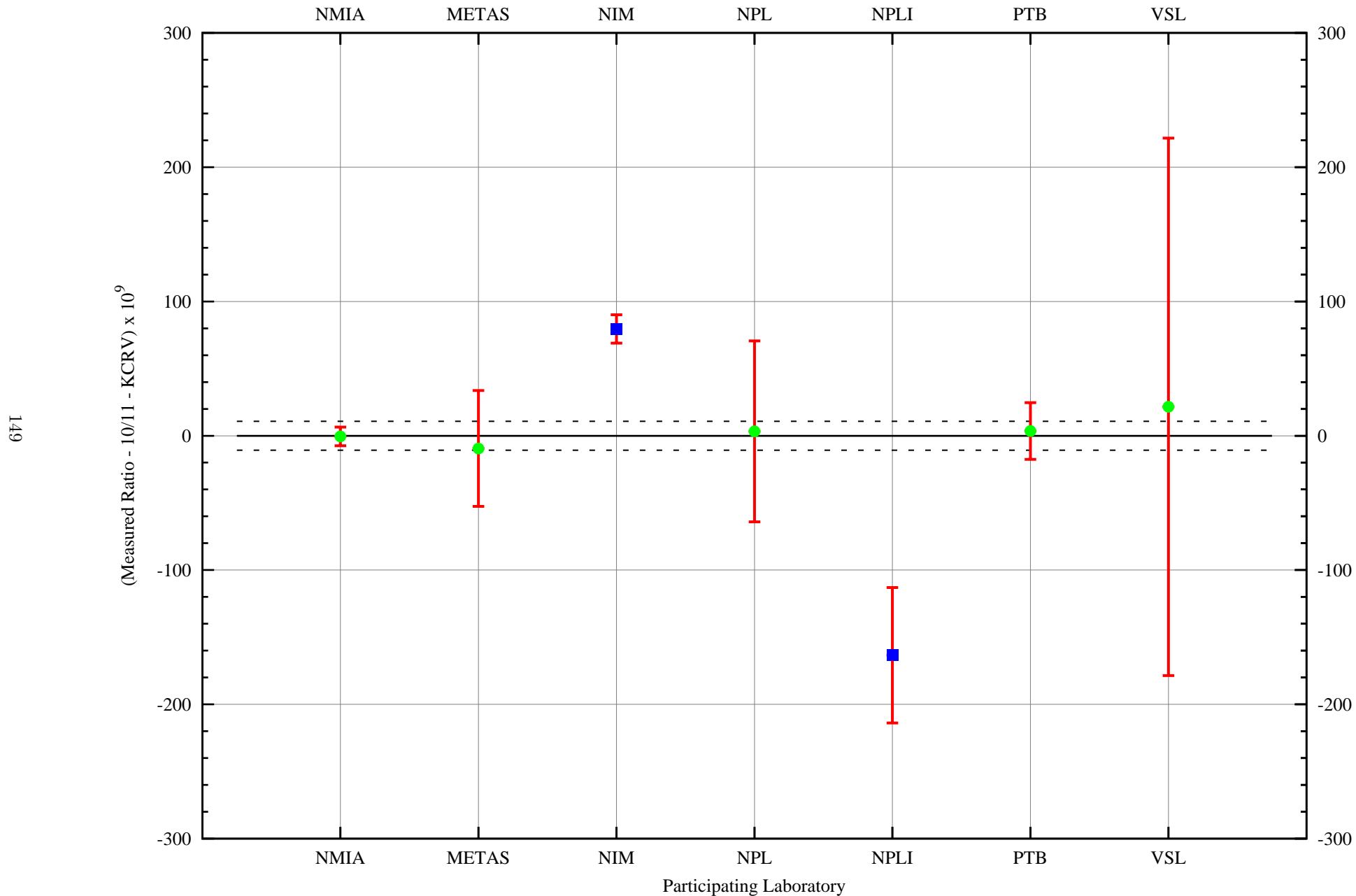
Table 138: Degree of equivalence to the KCRV for the Nominal Ratio 10/11 at 55 Hz, Quadrature Voltage Ratio (nV/V)

NMIA	METAS	NIM	NPL	NPLI	PTB	VSL
0.7 $\pm$ 1.4	$-21 \pm$ 85	63 $\pm$ 28	$-7 \pm$ 68	256 $\pm$ 500	$-9 \pm$ 20	-154 ± 1000

Table 139: Laboratory - Laboratory degree of equivalence for the Nominal Ratio 10/11 at 55 Hz, Quadrature Voltage Ratio (nV/V)

	NMIA	METAS	NIM	NPL	NPLI	PTB	VSL
NMIA		22 $\pm$ 86	$-62 \pm$ 29	7 $\pm$ 69	$-255 \pm$ 500	10 $\pm$ 21	155 ± 1000
METAS	$-22 \pm$ 86		$-84 \pm$ 90	$-15 \pm$ 109	$-277 \pm$ 507	$-12 \pm$ 88	133 ± 1004
NIM	62 $\pm$ 29	84 $\pm$ 90		69 $\pm$ 74	$-193 \pm$ 501	72 $\pm$ 35	217 ± 1000
NPL	$-7 \pm$ 69	15 $\pm$ 109	$-69 \pm$ 74		$-262 \pm$ 505	3 $\pm$ 72	148 ± 1002
NPLI	255 $\pm$ 500	277 $\pm$ 507	193 $\pm$ 501	262 $\pm$ 505		265 $\pm$ 500	410 ± 1118
PTB	$-10 \pm$ 21	12 $\pm$ 88	$-72 \pm$ 35	$-3 \pm$ 72	$-265 \pm$ 500		145 ± 1000
VSL	-155 ± 1000	-133 ± 1004	-217 ± 1000	-148 ± 1002	-410 ± 1118	-145 ± 1000	

Nominal Ratio: 10/11 at 55 Hz, Quadrature Voltage Ratio (KCRV $\pm$ 2σ) is (-145.7 $\pm$ 5.1) x 10^{-9} of input
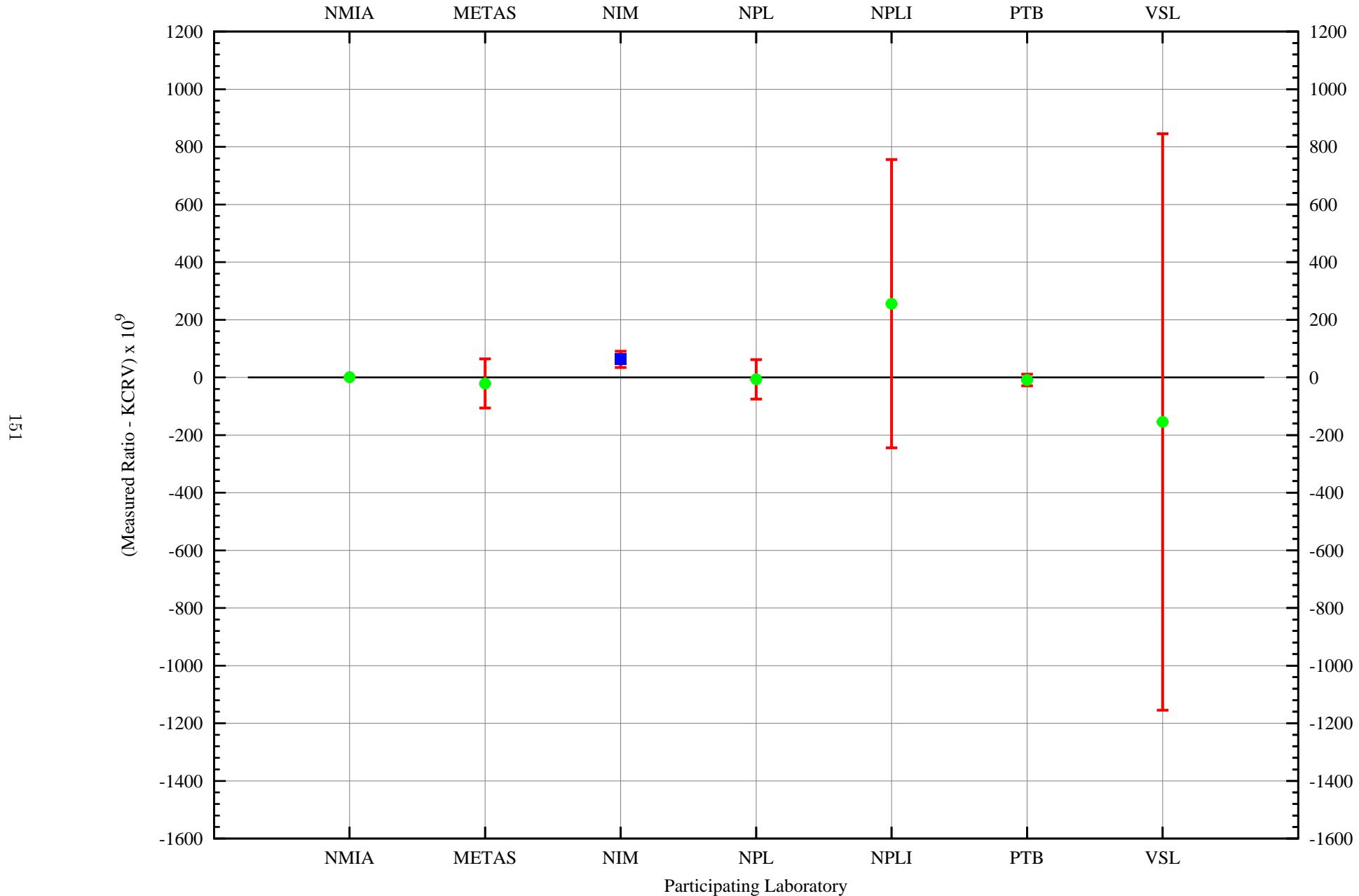
Table 140: Degree of equivalence to the KCRV for the Nominal Ratio 9/11 at 55 Hz, In-Phase Voltage Ratio (nV/V)

NMIA	METAS	NIM	NPL	NPLI	PTB	VSL
0.4 ± 7.3	−8 ± 43	49 ± 25	3 ± 67	−155 ± 50	0 ± 21	−7 ± 200

Table 141: Laboratory - Laboratory degree of equivalence for the Nominal Ratio 9/11 at 55 Hz, In-Phase Voltage Ratio (nV/V)

	NMIA	METAS	NIM	NPL	NPLI	PTB	VSL
NMIA		8 ± 46	−49 ± 30	−3 ± 69	155 ± 53	0 ± 27	7 ± 201
METAS	−8 ± 46		−57 ± 52	−11 ± 81	147 ± 68	−8 ± 50	−1 ± 205
NIM	49 ± 30	57 ± 52		46 ± 73	204 ± 58	49 ± 36	56 ± 202
NPL	3 ± 69	11 ± 81	−46 ± 73		158 ± 86	3 ± 72	10 ± 212
NPLI	−155 ± 53	−147 ± 68	−204 ± 58	−158 ± 86		−155 ± 57	−148 ± 207
PTB	0 ± 27	8 ± 50	−49 ± 36	−3 ± 72	155 ± 57		7 ± 202
VSL	−7 ± 201	1 ± 205	−56 ± 202	−10 ± 212	148 ± 207	−7 ± 202	

Nominal Ratio: 9/11 at 55 Hz, In-Phase Voltage Ratio (KCRV $\pm$ 2σ) is (18.4 $\pm$ 11.0) x 10^{-9} of input
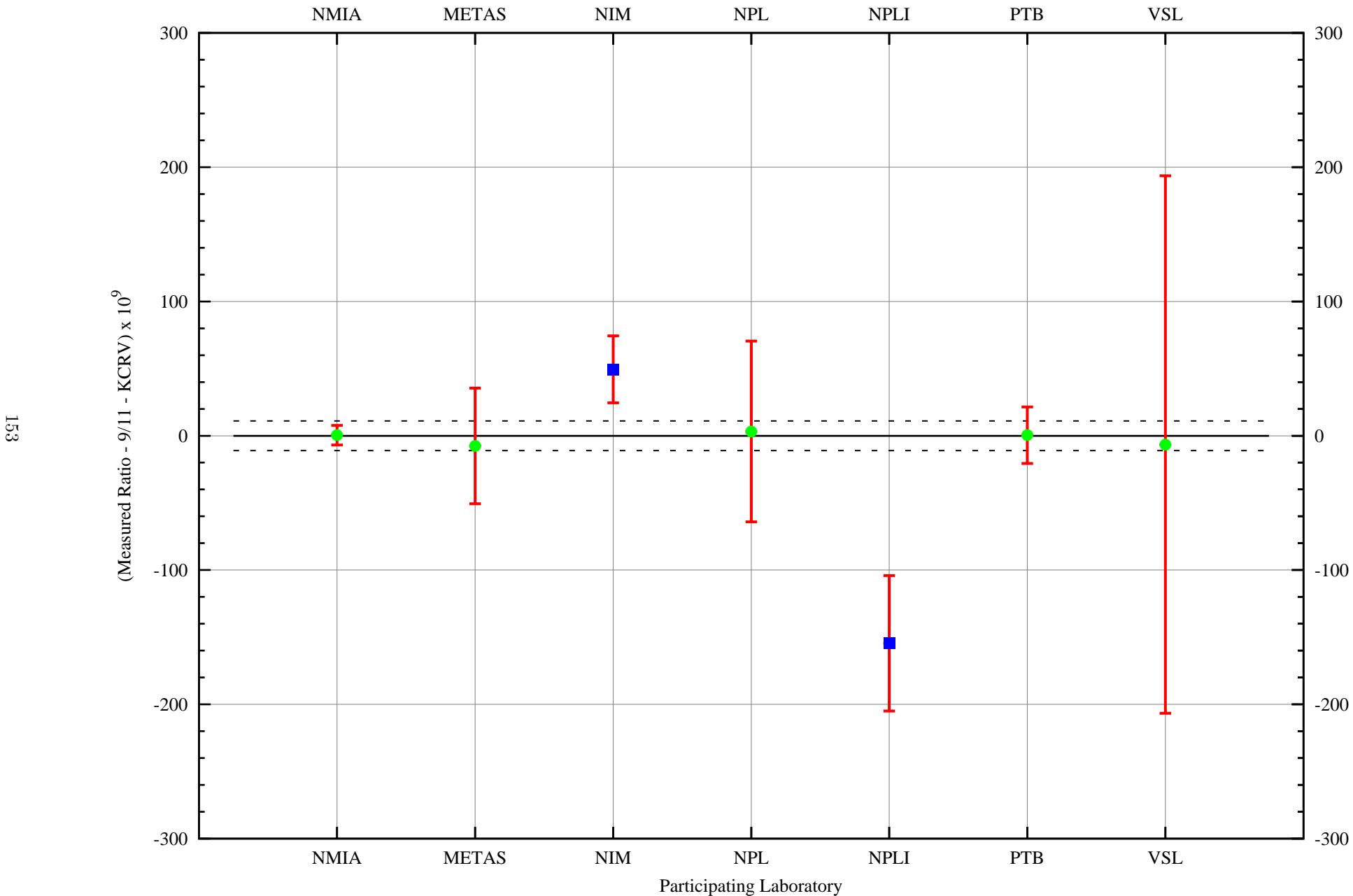
Table 142: Degree of equivalence to the KCRV for the Nominal Ratio 9/11 at 55 Hz, Quadrature Voltage Ratio (nV/V)

NMIA	METAS	NIM	NPL	NPLI	PTB	VSL
-0.6 ± 1.6	0 ± 92	35 ± 36	-5 ± 68	500 ± 500	-4 ± 20	-130 ± 1000

Table 143: Laboratory - Laboratory degree of equivalence for the Nominal Ratio 9/11 at 55 Hz, Quadrature Voltage Ratio (nV/V)

	NMIA	METAS	NIM	NPL	NPLI	PTB	VSL
NMIA		-1 ± 92	-36 ± 37	4 ± 69	-501 ± 500	3 ± 21	129 ± 1000
METAS	1 ± 92		-35 ± 99	5 ± 115	-500 ± 508	4 ± 94	130 ± 1004
NIM	36 ± 37	35 ± 99		40 ± 78	-465 ± 501	39 ± 42	165 ± 1001
NPL	-4 ± 69	-5 ± 115	-40 ± 78		-505 ± 505	-1 ± 72	125 ± 1002
NPLI	501 ± 500	500 ± 508	465 ± 501	505 ± 505		504 ± 500	630 ± 1118
PTB	-3 ± 21	-4 ± 94	-39 ± 42	1 ± 72	-504 ± 500		126 ± 1000
VSL	-129 ± 1000	-130 ± 1004	-165 ± 1001	-125 ± 1002	-630 ± 1118	-126 ± 1000	

Nominal Ratio: 9/11 at 55 Hz, Quadrature Voltage Ratio (KCRV ± 2σ) is (-30.4 ± 5.2) x 10^{-9} of input
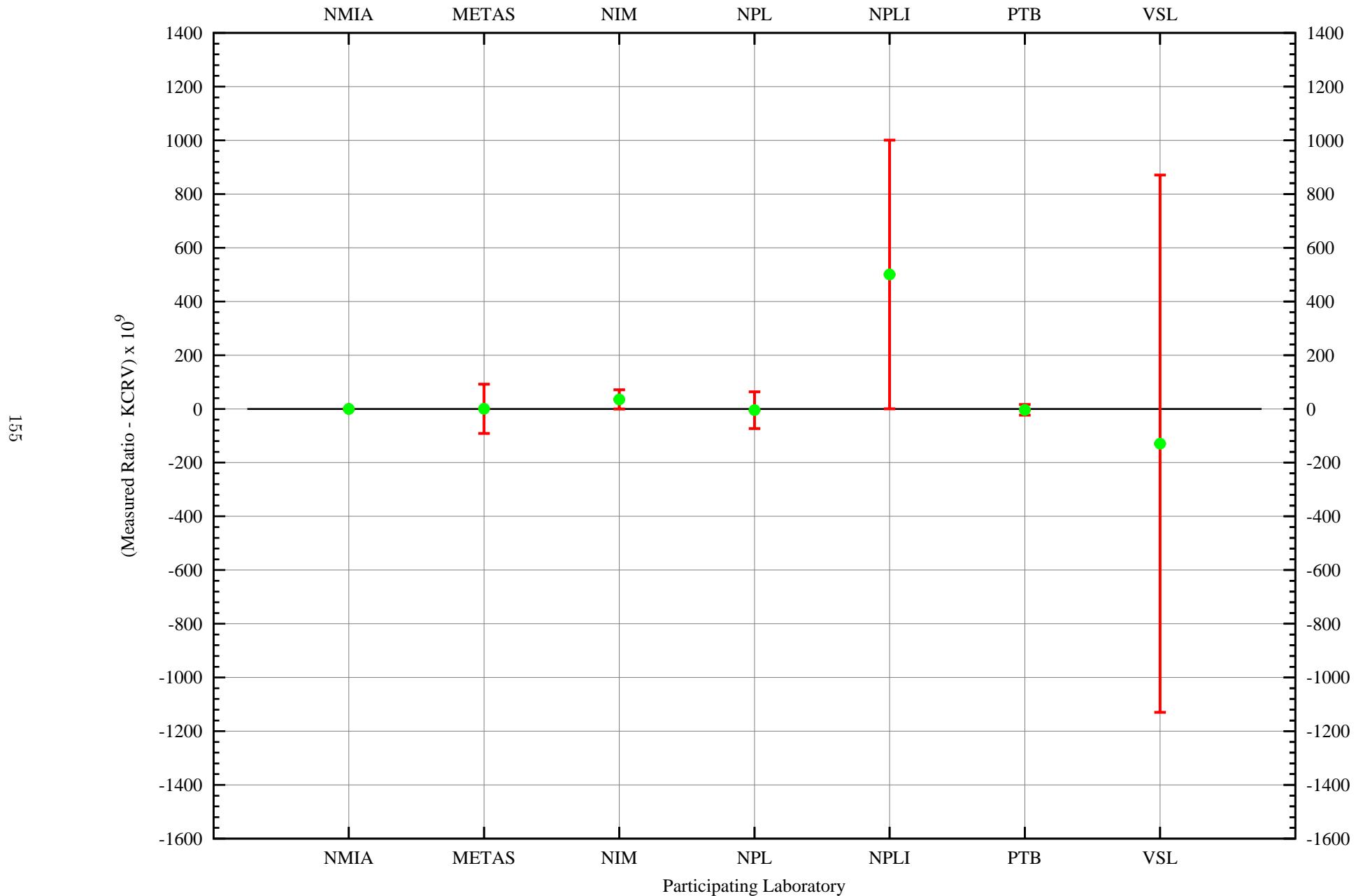
Table 144: Degree of equivalence to the KCRV for the Nominal Ratio 8/11 at 55 Hz, In-Phase Voltage Ratio (nV/V)

NMIA	METAS	NIM	NPL	NPLI	PTB	VSL
−4.0 ± 7.9	−10 ± 52	36 ± 29	1 ± 67	−152 ± 51	−6 ± 21	2 ± 200

Table 145: Laboratory - Laboratory degree of equivalence for the Nominal Ratio 8/11 at 55 Hz, In-Phase Voltage Ratio (nV/V)

	NMIA	METAS	NIM	NPL	NPLI	PTB	VSL
NMIA		6 ± 55	−40 ± 33	−5 ± 69	148 ± 53	2 ± 27	−6 ± 201
METAS	−6 ± 55		−46 ± 62	−11 ± 87	142 ± 74	−4 ± 58	−12 ± 207
NIM	40 ± 33	46 ± 62		35 ± 75	188 ± 60	42 ± 39	34 ± 203
NPL	5 ± 69	11 ± 87	−35 ± 75		153 ± 86	7 ± 72	−1 ± 212
NPLI	−148 ± 53	−142 ± 74	−188 ± 60	−153 ± 86		−146 ± 57	−154 ± 207
PTB	−2 ± 27	4 ± 58	−42 ± 39	−7 ± 72	146 ± 57		−8 ± 202
VSL	6 ± 201	12 ± 207	−34 ± 203	1 ± 212	154 ± 207	8 ± 202	

Nominal Ratio: 8/11 at 55 Hz, In-Phase Voltage Ratio (KCRV $\pm$ 2σ) is (-9.2 $\pm$ 10.4) x 10^{-9} of input
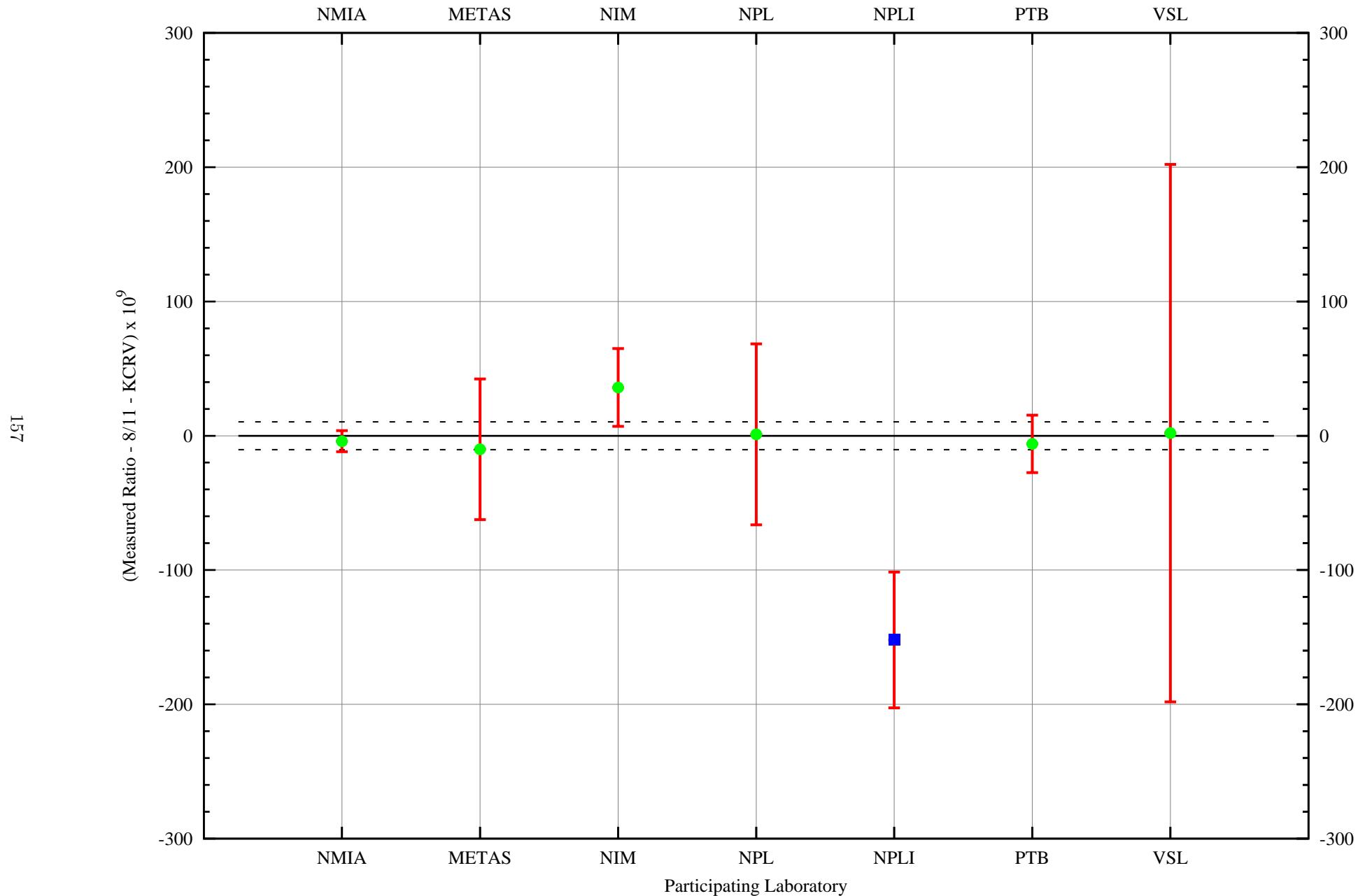
Table 146: Degree of equivalence to the KCRV for the Nominal Ratio 8/11 at 55 Hz, Quadrature Voltage Ratio (nV/V)

NMIA	METAS	NIM	NPL	NPLI	PTB	VSL
−0.9 ± 1.7	13 ± 96	54 ± 48	−5 ± 68	515 ± 500	1 ± 20	35 ±1000

Table 147: Laboratory - Laboratory degree of equivalence for the Nominal Ratio 8/11 at 55 Hz, Quadrature Voltage Ratio (nV/V)

	NMIA	METAS	NIM	NPL	NPLI	PTB	VSL
NMIA		−14 ± 97	−55 ± 49	4 ± 69	−516 ± 500	−2 ± 21	−36 ±1000
METAS	14 ± 97		−41 ± 108	18 ± 118	−502 ± 509	12 ± 99	−22 ±1005
NIM	55 ± 49	41 ± 108		59 ± 84	−461 ± 502	53 ± 53	19 ±1001
NPL	−4 ± 69	−18 ± 118	−59 ± 84		−520 ± 505	−6 ± 72	−40 ±1002
NPLI	516 ± 500	502 ± 509	461 ± 502	520 ± 505		514 ± 500	480 ±1118
PTB	2 ± 21	−12 ± 99	−53 ± 53	6 ± 72	−514 ± 500		−34 ±1000
VSL	36 ±1000	22 ±1005	−19 ±1001	40 ±1002	−480 ±1118	34 ±1000	

Nominal Ratio: 8/11 at 55 Hz, Quadrature Voltage Ratio (KCRV ± 2σ) is (-5.1 ± 5.4) x 10^{-9} of input
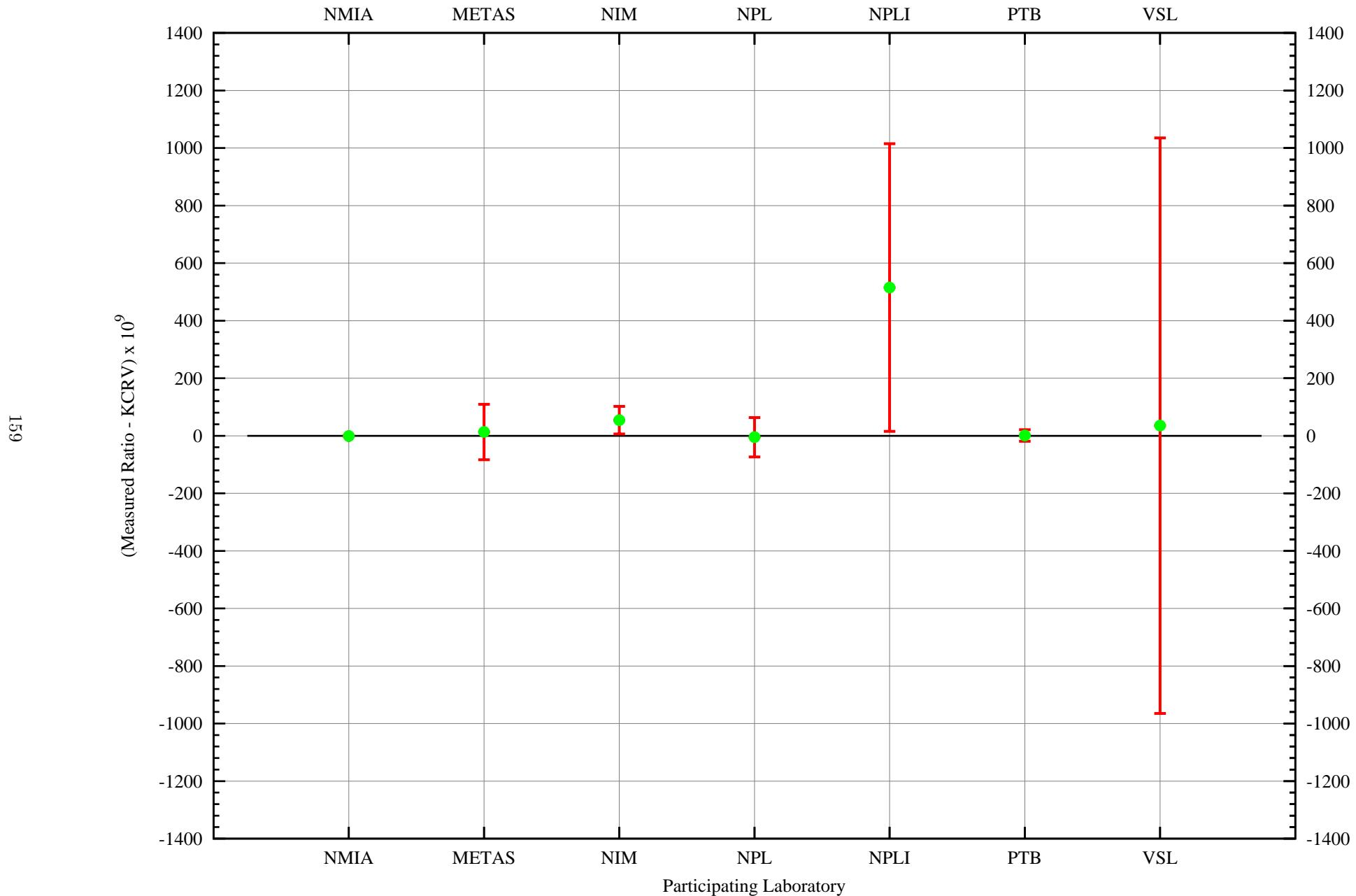
Table 148: Degree of equivalence to the KCRV for the Nominal Ratio 7/11 at 55 Hz, In-Phase Voltage Ratio (nV/V)

NMIA	METAS	NIM	NPL	NPLI	PTB	VSL
-3.3 ± 8.2	-13 ± 59	27 ± 25	0 ± 67	-104 ± 51	-7 ± 21	-10 ± 200

Table 149: Laboratory - Laboratory degree of equivalence for the Nominal Ratio 7/11 at 55 Hz, In-Phase Voltage Ratio (nV/V)

	NMIA	METAS	NIM	NPL	NPLI	PTB	VSL
NMIA		10 ± 61	-30 ± 30	-4 ± 69	101 ± 53	4 ± 27	7 ± 201
METAS	-10 ± 61		-40 ± 65	-14 ± 91	91 ± 79	-6 ± 64	-3 ± 209
NIM	30 ± 30	40 ± 65		26 ± 73	131 ± 58	34 ± 36	37 ± 202
NPL	4 ± 69	14 ± 91	-26 ± 73		104 ± 86	8 ± 72	10 ± 212
NPLI	-101 ± 53	-91 ± 79	-131 ± 58	-104 ± 86		-97 ± 57	-94 ± 207
PTB	-4 ± 27	6 ± 64	-34 ± 36	-8 ± 72	97 ± 57		3 ± 202
VSL	-7 ± 201	3 ± 209	-37 ± 202	-10 ± 212	94 ± 207	-3 ± 202	

Nominal Ratio: 7/11 at 55 Hz, In-Phase Voltage Ratio (KCRV $\pm$ 2σ) is (-96.1 $\pm$ 10.3) x 10^{-9} of input
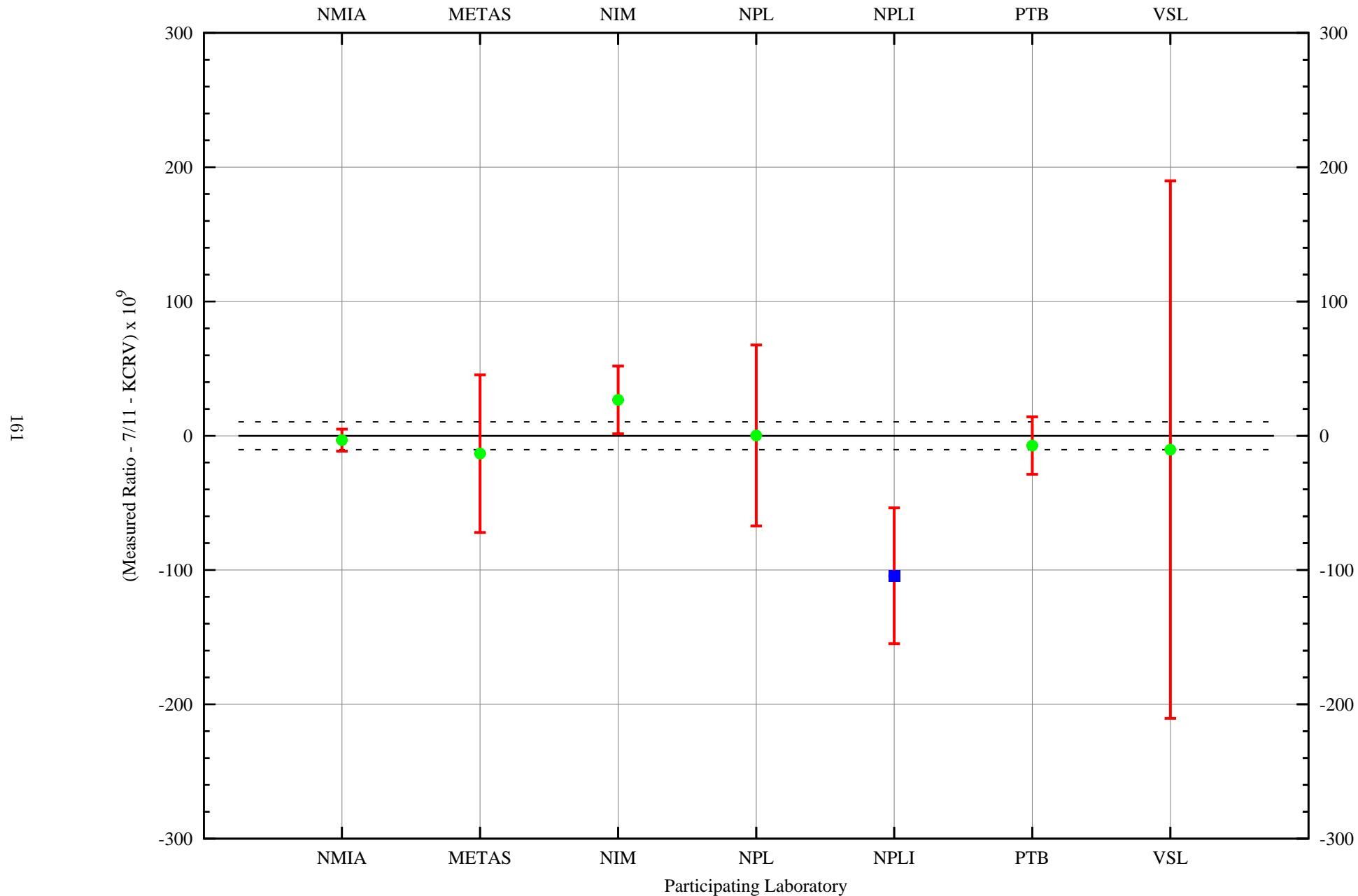
Table 150: Degree of equivalence to the KCRV for the Nominal Ratio 7/11 at 55 Hz, Quadrature Voltage Ratio (nV/V)

NMIA	METAS	NIM	NPL	NPLI	PTB	VSL
−1.2 ± 1.9	33 ± 101	8 ± 36	1 ± 68	754 ± 500	9 ± 20	194 ±1000

Table 151: Laboratory - Laboratory degree of equivalence for the Nominal Ratio 7/11 at 55 Hz, Quadrature Voltage Ratio (nV/V)

	NMIA	METAS	NIM	NPL	NPLI	PTB	VSL
NMIA		−34 ± 101	−9 ± 37	−2 ± 69	−755 ± 500	−10 ± 21	−195 ±1000
METAS	34 ± 101		25 ± 107	32 ± 122	−721 ± 510	24 ± 103	−161 ±1005
NIM	9 ± 37	−25 ± 107		7 ± 78	−746 ± 501	−1 ± 42	−186 ±1001
NPL	2 ± 69	−32 ± 122	−7 ± 78		−753 ± 505	−8 ± 72	−193 ±1002
NPLI	755 ± 500	721 ± 510	746 ± 501	753 ± 505		745 ± 500	560 ±1118
PTB	10 ± 21	−24 ± 103	1 ± 42	8 ± 72	−745 ± 500		−185 ±1000
VSL	195 ±1000	161 ±1005	186 ±1001	193 ±1002	−560 ±1118	185 ±1000	

Nominal Ratio: 7/11 at 55 Hz, Quadrature Voltage Ratio (KCRV $\pm$ 2σ) is (96.2 $\pm$ 5.6) x 10^{-9} of input
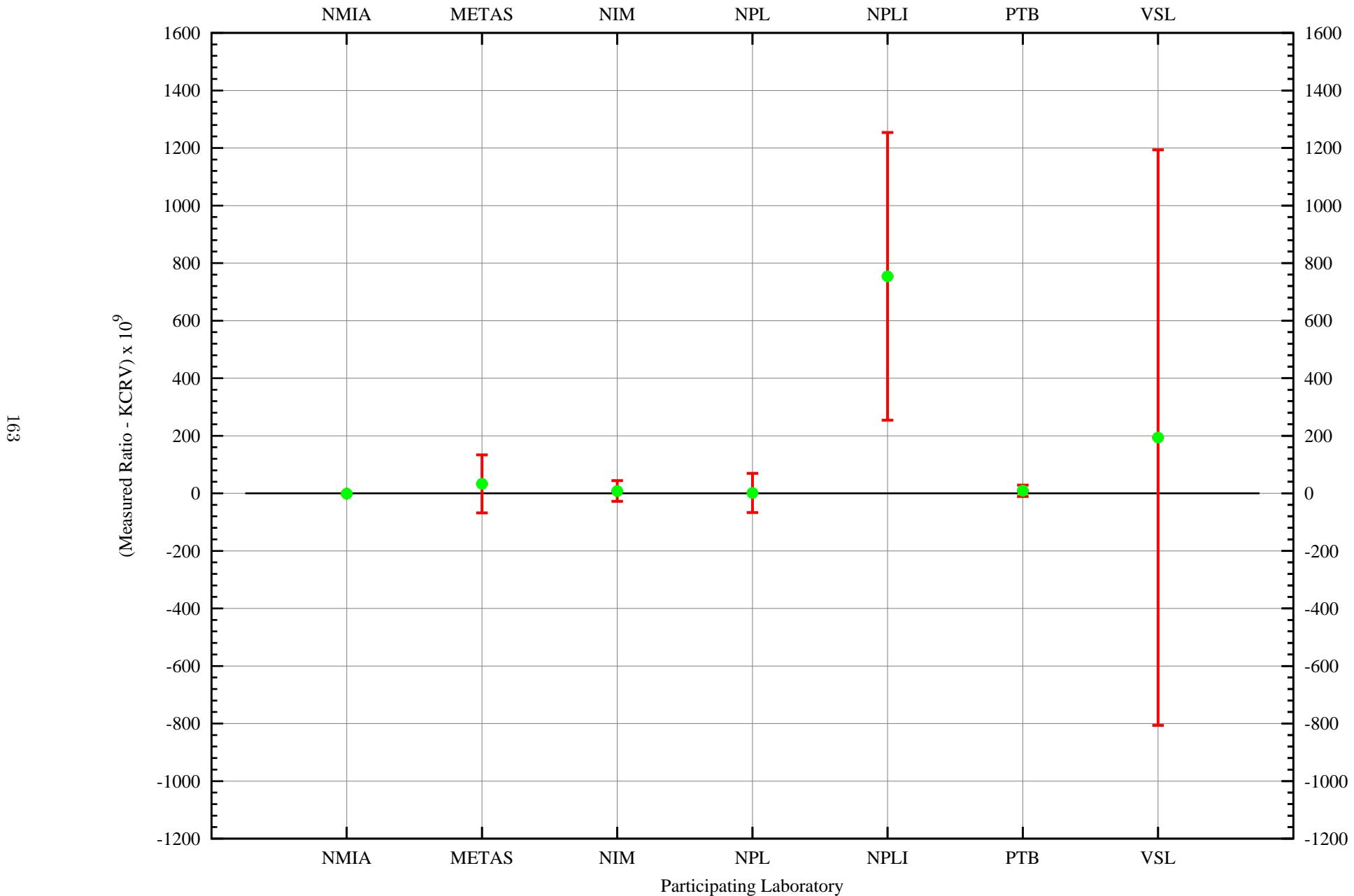
Table 152: Degree of equivalence to the KCRV for the Nominal Ratio 6/11 at 55 Hz, In-Phase Voltage Ratio (nV/V)

NMIA	METAS	NIM	NPL	NPLI	PTB	VSL
4.0 ± 7.9	−11 ± 55	7 ± 33	3 ± 67	−60 ± 51	−2 ± 21	−25 ± 200

Table 153: Laboratory - Laboratory degree of equivalence for the Nominal Ratio 6/11 at 55 Hz, In-Phase Voltage Ratio (nV/V)

	NMIA	METAS	NIM	NPL	NPLI	PTB	VSL
NMIA		15 ± 58	−3 ± 37	2 ± 69	64 ± 53	6 ± 27	29 ± 201
METAS	−15 ± 58		−18 ± 66	−14 ± 88	49 ± 76	−9 ± 61	14 ± 208
NIM	3 ± 37	18 ± 66		4 ± 76	67 ± 62	9 ± 42	32 ± 203
NPL	−2 ± 69	14 ± 88	−4 ± 76		62 ± 86	4 ± 72	28 ± 212
NPLI	−64 ± 53	−49 ± 76	−67 ± 62	−62 ± 86		−58 ± 57	−35 ± 207
PTB	−6 ± 27	9 ± 61	−9 ± 42	−4 ± 72	58 ± 57		23 ± 202
VSL	−29 ± 201	−14 ± 208	−32 ± 203	−28 ± 212	35 ± 207	−23 ± 202	

Nominal Ratio: 6/11 at 55 Hz, In-Phase Voltage Ratio (KCRV $\pm$ 2σ) is (-150.5 $\pm$ 10.3) x 10^{-9} of input
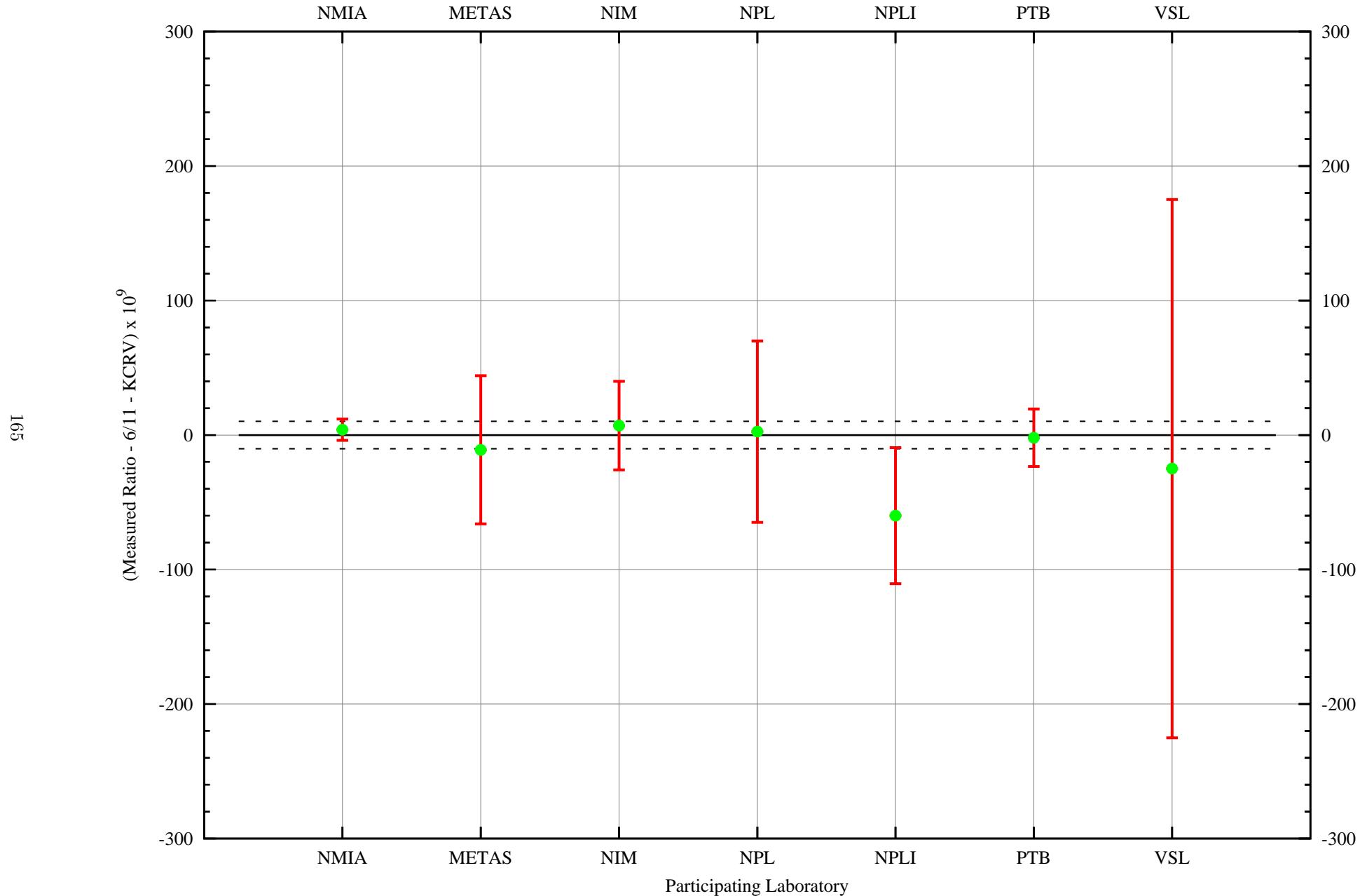
Table 154: Degree of equivalence to the KCRV for the Nominal Ratio 6/11 at 55 Hz, Quadrature Voltage Ratio (nV/V)

NMIA	METAS	NIM	NPL	NPLI	PTB	VSL
-1.2 $\pm$ 2.1	$43 \pm$ 103	$-10 \pm$ 28	$5 \pm$ 68	$802 \pm$ 500	$17 \pm$ 20	282 ± 1000

Table 155: Laboratory - Laboratory degree of equivalence for the Nominal Ratio 6/11 at 55 Hz, Quadrature Voltage Ratio (nV/V)

	NMIA	METAS	NIM	NPL	NPLI	PTB	VSL
NMIA		$-44 \pm$ 103	$9 \pm$ 29	$-7 \pm$ 69	$-803 \pm$ 500	$-18 \pm$ 22	-283 ± 1000
METAS	$44 \pm$ 103		$53 \pm$ 107	$37 \pm$ 124	$-759 \pm$ 510	$26 \pm$ 105	-239 ± 1005
NIM	$-9 \pm$ 29	$-53 \pm$ 107		$-16 \pm$ 74	$-812 \pm$ 501	$-27 \pm$ 35	-292 ± 1000
NPL	$7 \pm$ 69	$-37 \pm$ 124	$16 \pm$ 74		$-796 \pm$ 505	$-11 \pm$ 72	-276 ± 1002
NPLI	$803 \pm$ 500	$759 \pm$ 510	$812 \pm$ 501	$796 \pm$ 505		$785 \pm$ 500	520 ± 1118
PTB	$18 \pm$ 22	$-26 \pm$ 105	$27 \pm$ 35	$11 \pm$ 72	$-785 \pm$ 500		-265 ± 1000
VSL	283 ± 1000	239 ± 1005	292 ± 1000	276 ± 1002	-520 ± 1118	265 ± 1000	

Nominal Ratio: 6/11 at 55 Hz, Quadrature Voltage Ratio (KCRV $\pm$ 2σ) is (158.2 $\pm$ 5.6) x 10^{-9} of input
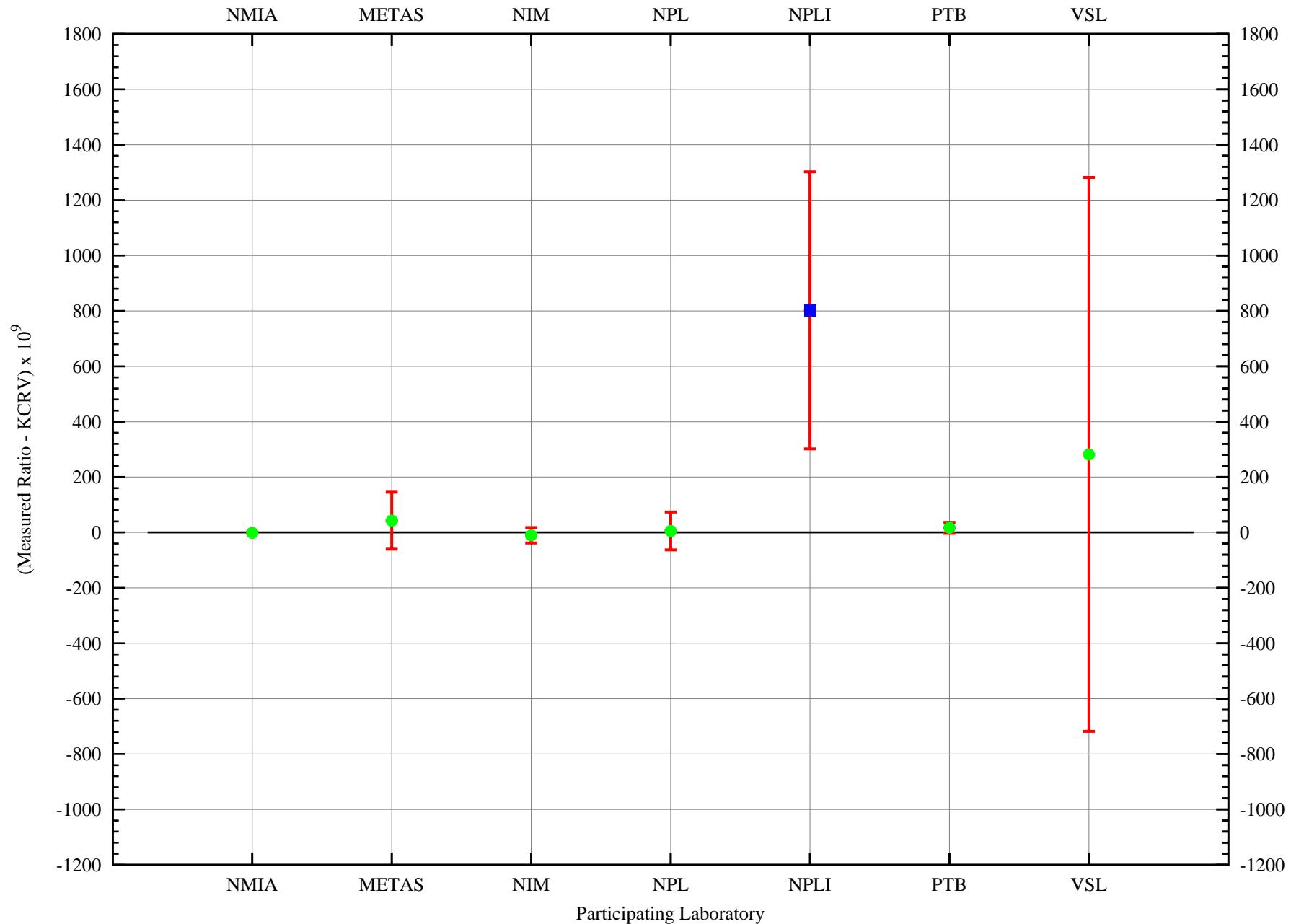
Table 156: Degree of equivalence to the KCRV for the Nominal Ratio 5/11 at 55 Hz, In-Phase Voltage Ratio (nV/V)

NMIA	METAS	NIM	NPL	NPLI	PTB	VSL
-0.8 ± 8.2	-19 ± 57	27 ± 25	-5 ± 67	-49 ± 51	-4 ± 22	-22 ± 200

Table 157: Laboratory - Laboratory degree of equivalence for the Nominal Ratio 5/11 at 55 Hz, In-Phase Voltage Ratio (nV/V)

	NMIA	METAS	NIM	NPL	NPLI	PTB	VSL
NMIA		18 ± 59	-28 ± 30	4 ± 69	48 ± 53	3 ± 27	21 ± 201
METAS	-18 ± 59		-46 ± 64	-14 ± 89	30 ± 77	-15 ± 62	3 ± 209
NIM	28 ± 30	46 ± 64		32 ± 73	76 ± 58	31 ± 36	49 ± 202
NPL	-4 ± 69	14 ± 89	-32 ± 73		44 ± 86	-2 ± 72	16 ± 212
NPLI	-48 ± 53	-30 ± 77	-76 ± 58	-44 ± 86		-45 ± 57	-27 ± 207
PTB	-3 ± 27	15 ± 62	-31 ± 36	2 ± 72	45 ± 57		18 ± 202
VSL	-21 ± 201	-3 ± 209	-49 ± 202	-16 ± 212	27 ± 207	-18 ± 202	

Nominal Ratio: 5/11 at 55 Hz, In-Phase Voltage Ratio (KCRV ± 2σ) is (-122.8 ± 10.0) x 10⁻⁹ of input
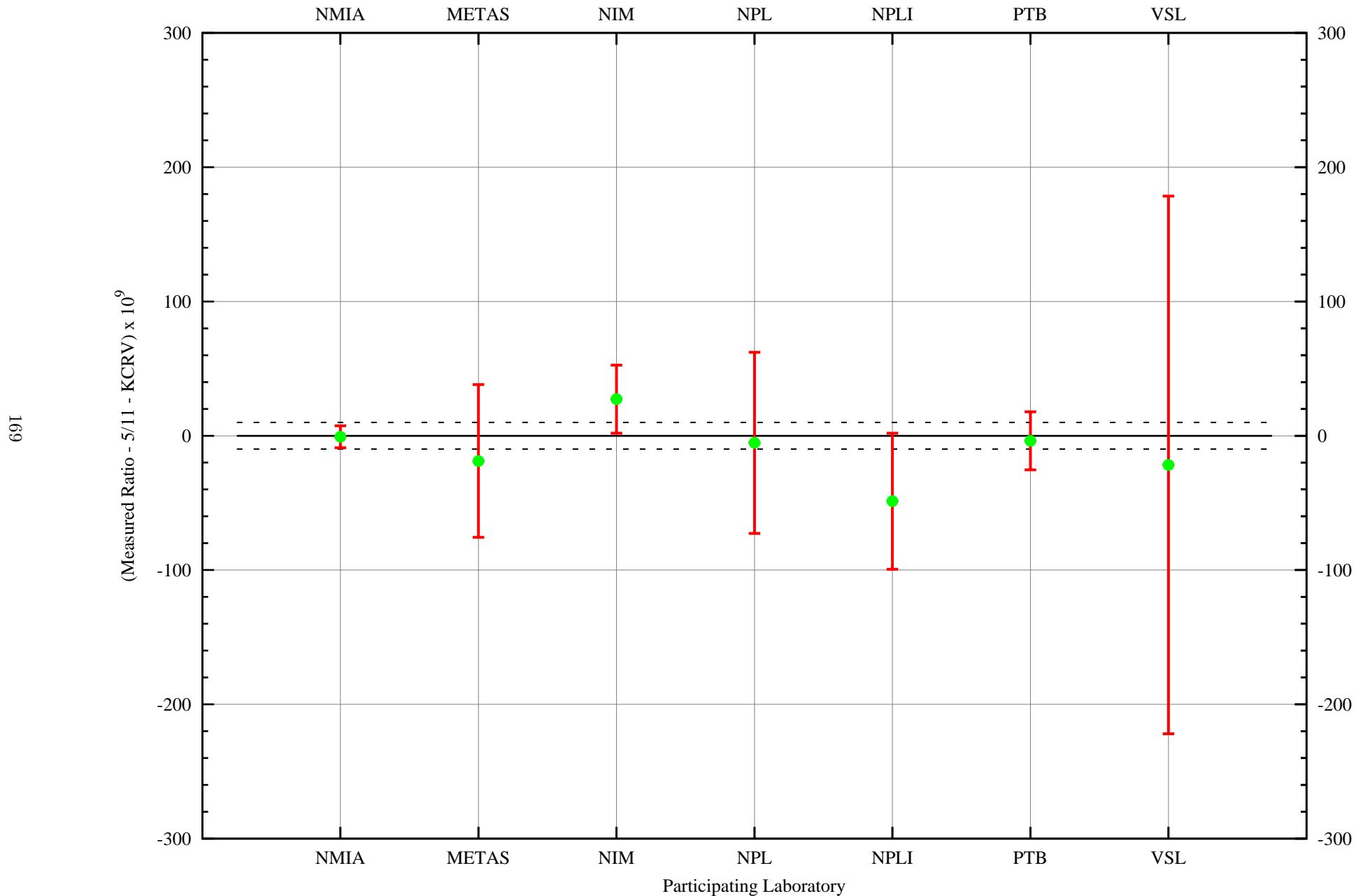
Table 158: Degree of equivalence to the KCRV for the Nominal Ratio 5/11 at 55 Hz, Quadrature Voltage Ratio (nV/V)

NMIA	METAS	NIM	NPL	NPLI	PTB	VSL
−1.8 ± 2.2	35 ± 109	8 ± 28	4 ± 68	679 ± 500	13 ± 20	209 ±1000

Table 159: Laboratory - Laboratory degree of equivalence for the Nominal Ratio 5/11 at 55 Hz, Quadrature Voltage Ratio (nV/V)

	NMIA	METAS	NIM	NPL	NPLI	PTB	VSL
NMIA		−37 ± 110	−10 ± 29	−6 ± 69	−681 ± 500	−15 ± 22	−211 ±1000
METAS	37 ± 110		27 ± 113	31 ± 129	−644 ± 512	22 ± 112	−174 ±1006
NIM	10 ± 29	−27 ± 113		4 ± 74	−671 ± 501	−5 ± 35	−201 ±1000
NPL	6 ± 69	−31 ± 129	−4 ± 74		−675 ± 505	−9 ± 72	−205 ±1002
NPLI	681 ± 500	644 ± 512	671 ± 501	675 ± 505		666 ± 500	470 ±1118
PTB	15 ± 22	−22 ± 112	5 ± 35	9 ± 72	−666 ± 500		−196 ±1000
VSL	211 ±1000	174 ±1006	201 ±1000	205 ±1002	−470 ±1118	196 ±1000	

Nominal Ratio: 5/11 at 55 Hz, Quadrature Voltage Ratio (KCRV $\pm$ 2σ) is (150.8 $\pm$ 5.7) x 10^{-9} of input
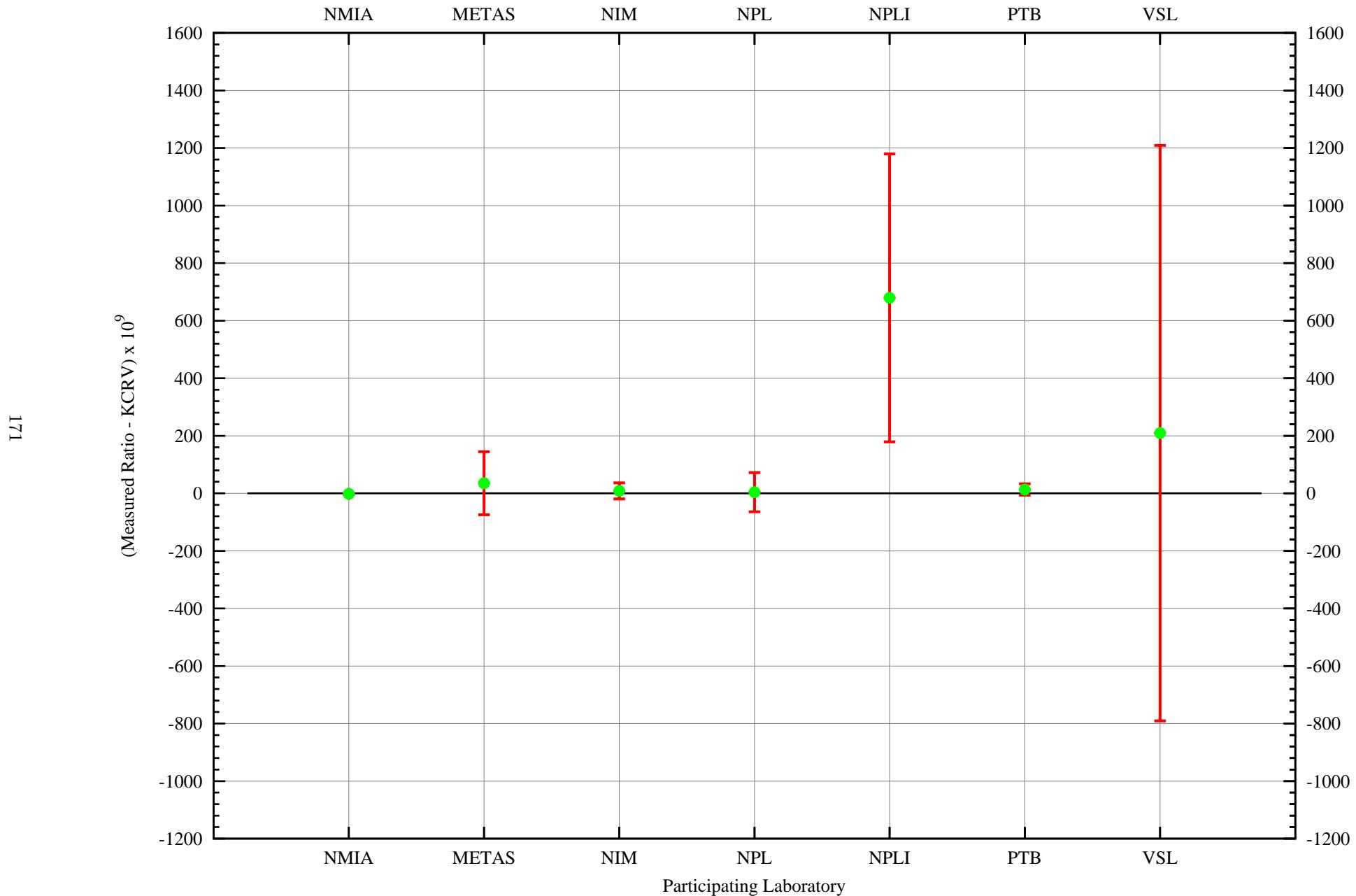
Table 160: Degree of equivalence to the KCRV for the Nominal Ratio 4/11 at 55 Hz, In-Phase Voltage Ratio (nV/V)

NMIA	METAS	NIM	NPL	NPLI	PTB	VSL
0.0 ± 7.2	−19 ± 55	−44 ± 21	−8 ± 67	67 ± 50	−9 ± 21	−75 ± 200

Table 161: Laboratory - Laboratory degree of equivalence for the Nominal Ratio 4/11 at 55 Hz, In-Phase Voltage Ratio (nV/V)

	NMIA	METAS	NIM	NPL	NPLI	PTB	VSL
NMIA		19 ± 57	44 ± 27	8 ± 69	−67 ± 53	9 ± 27	75 ± 201
METAS	−19 ± 57		25 ± 61	−11 ± 88	−86 ± 76	−10 ± 61	56 ± 208
NIM	−44 ± 27	−25 ± 61		−36 ± 72	−111 ± 57	−35 ± 34	31 ± 202
NPL	−8 ± 69	11 ± 88	36 ± 72		−75 ± 86	1 ± 72	67 ± 212
NPLI	67 ± 53	86 ± 76	111 ± 57	75 ± 86		76 ± 57	142 ± 207
PTB	−9 ± 27	10 ± 61	35 ± 34	−1 ± 72	−76 ± 57		66 ± 202
VSL	−75 ± 201	−56 ± 208	−31 ± 202	−67 ± 212	−142 ± 207	−66 ± 202	

Nominal Ratio: 4/11 at 55 Hz, In-Phase Voltage Ratio (KCRV ± 2σ) is (-258.7 ± 10.7) x 10^{-9} of input
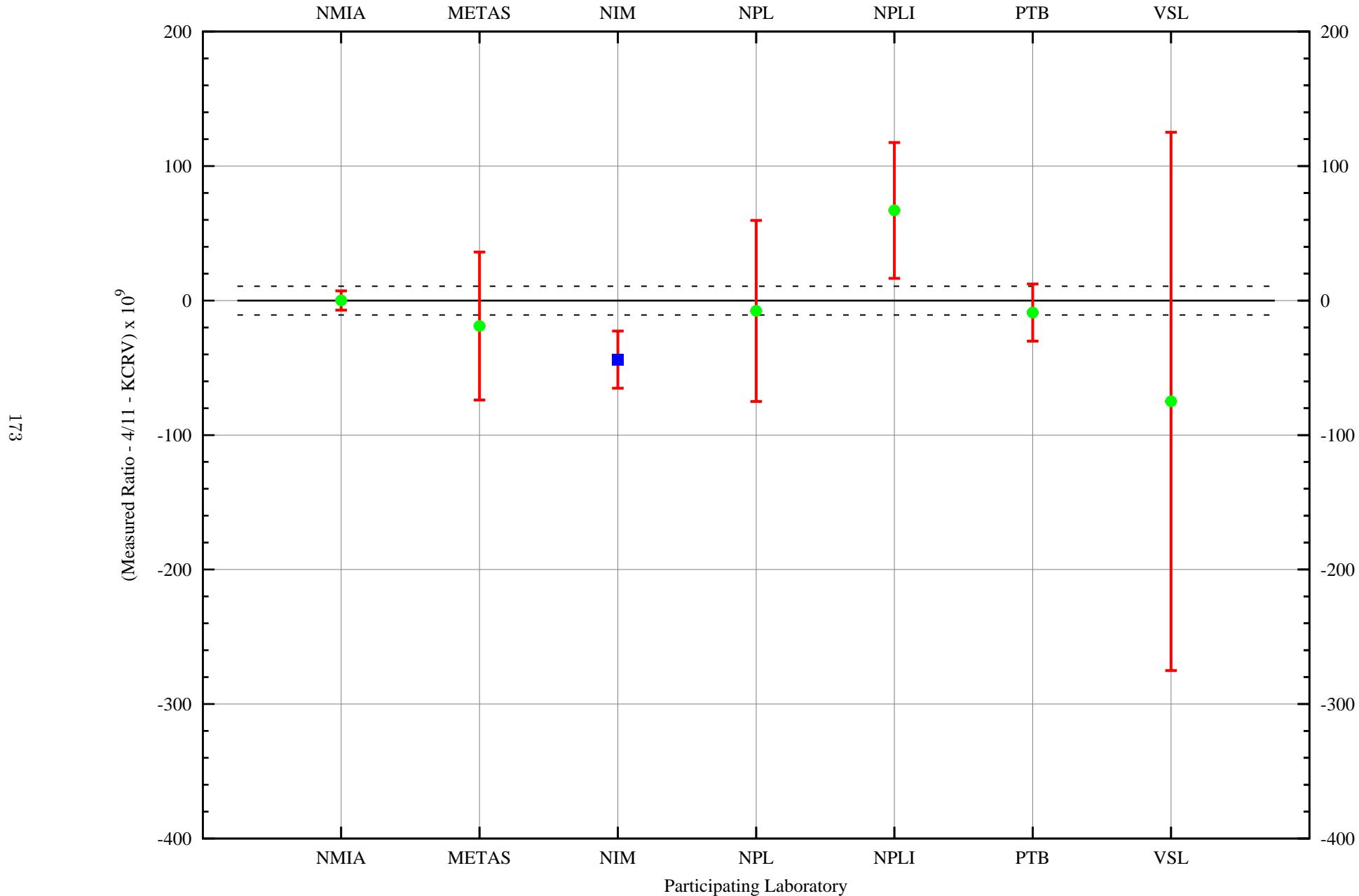
Table 162: Degree of equivalence to the KCRV for the Nominal Ratio 4/11 at 55 Hz, Quadrature Voltage Ratio (nV/V)

NMIA	METAS	NIM	NPL	NPLI	PTB	VSL
-2.9 $\pm$ 2.5	$60 \pm$ 109	$-103 \pm$ 24	$9 \pm$ 68	$1122 \pm$ 500	$21 \pm$ 20	202 ± 1000

Table 163: Laboratory - Laboratory degree of equivalence for the Nominal Ratio 4/11 at 55 Hz, Quadrature Voltage Ratio (nV/V)

	NMIA	METAS	NIM	NPL	NPLI	PTB	VSL
NMIA		$-63 \pm$ 110	$100 \pm$ 26	$-12 \pm$ 69	$-1125 \pm$ 500	$-24 \pm$ 22	-205 ± 1000
METAS	$63 \pm$ 110		$163 \pm$ 112	$51 \pm$ 129	$-1062 \pm$ 512	$39 \pm$ 112	-142 ± 1006
NIM	$-100 \pm$ 26	$-163 \pm$ 112		$-112 \pm$ 73	$-1225 \pm$ 501	$-124 \pm$ 32	-305 ± 1000
NPL	$12 \pm$ 69	$-51 \pm$ 129	$112 \pm$ 73		$-1113 \pm$ 505	$-12 \pm$ 72	-193 ± 1002
NPLI	$1125 \pm$ 500	$1062 \pm$ 512	$1225 \pm$ 501	$1113 \pm$ 505		$1101 \pm$ 500	920 ± 1118
PTB	$24 \pm$ 22	$-39 \pm$ 112	$124 \pm$ 32	$12 \pm$ 72	$-1101 \pm$ 500		-181 ± 1000
VSL	205 ± 1000	142 ± 1006	305 ± 1000	193 ± 1002	-920 ± 1118	181 ± 1000	

Nominal Ratio: 4/11 at 55 Hz, Quadrature Voltage Ratio (KCRV $\pm$ 2σ) is (327.9 $\pm$ 6.7) x 10^{-9} of input
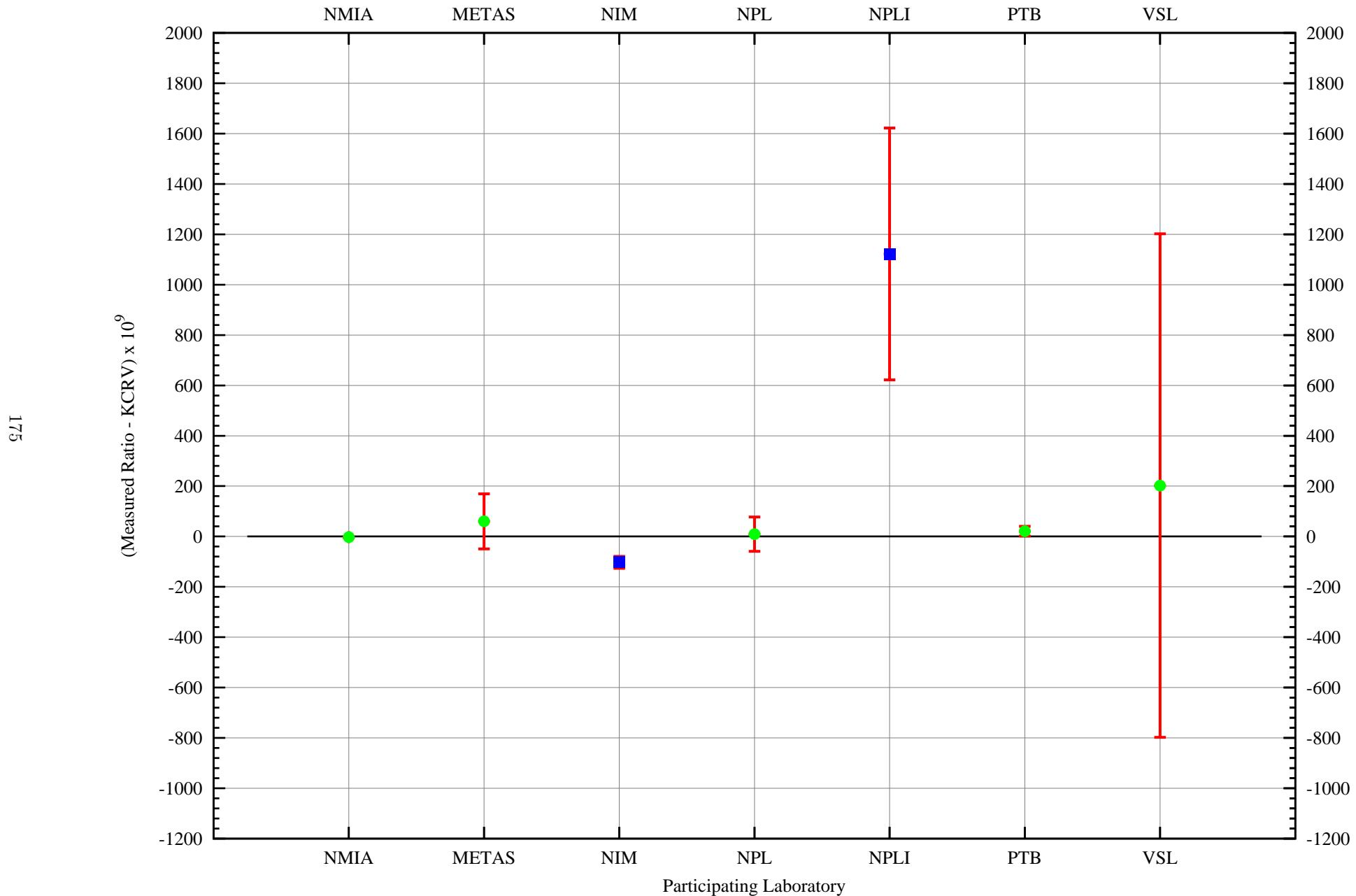
Table 164: Degree of equivalence to the KCRV for the Nominal Ratio 3/11 at 55 Hz, In-Phase Voltage Ratio (nV/V)

NMIA	METAS	NIM	NPL	NPLI	PTB	VSL
7.9 ± 8.2	−9 ± 50	−24 ± 22	1 ± 67	81 ± 51	−0 ± 22	−79 ± 200

Table 165: Laboratory - Laboratory degree of equivalence for the Nominal Ratio 3/11 at 55 Hz, In-Phase Voltage Ratio (nV/V)

	NMIA	METAS	NIM	NPL	NPLI	PTB	VSL
NMIA		17 ± 52	32 ± 27	7 ± 69	−73 ± 53	8 ± 27	87 ± 201
METAS	−17 ± 52		15 ± 56	−10 ± 85	−90 ± 72	−9 ± 56	70 ± 207
NIM	−32 ± 27	−15 ± 56		−25 ± 72	−105 ± 57	−24 ± 34	55 ± 202
NPL	−7 ± 69	10 ± 85	25 ± 72		−80 ± 86	1 ± 72	80 ± 212
NPLI	73 ± 53	90 ± 72	105 ± 57	80 ± 86		81 ± 57	160 ± 207
PTB	−8 ± 27	9 ± 56	24 ± 34	−1 ± 72	−81 ± 57		79 ± 202
VSL	−87 ± 201	−70 ± 207	−55 ± 202	−80 ± 212	−160 ± 207	−79 ± 202	

Nominal Ratio: 3/11 at 55 Hz, In-Phase Voltage Ratio (KCRV $\pm$ 2σ) is (-253.7 $\pm$ 9.9) x 10^{-9} of input
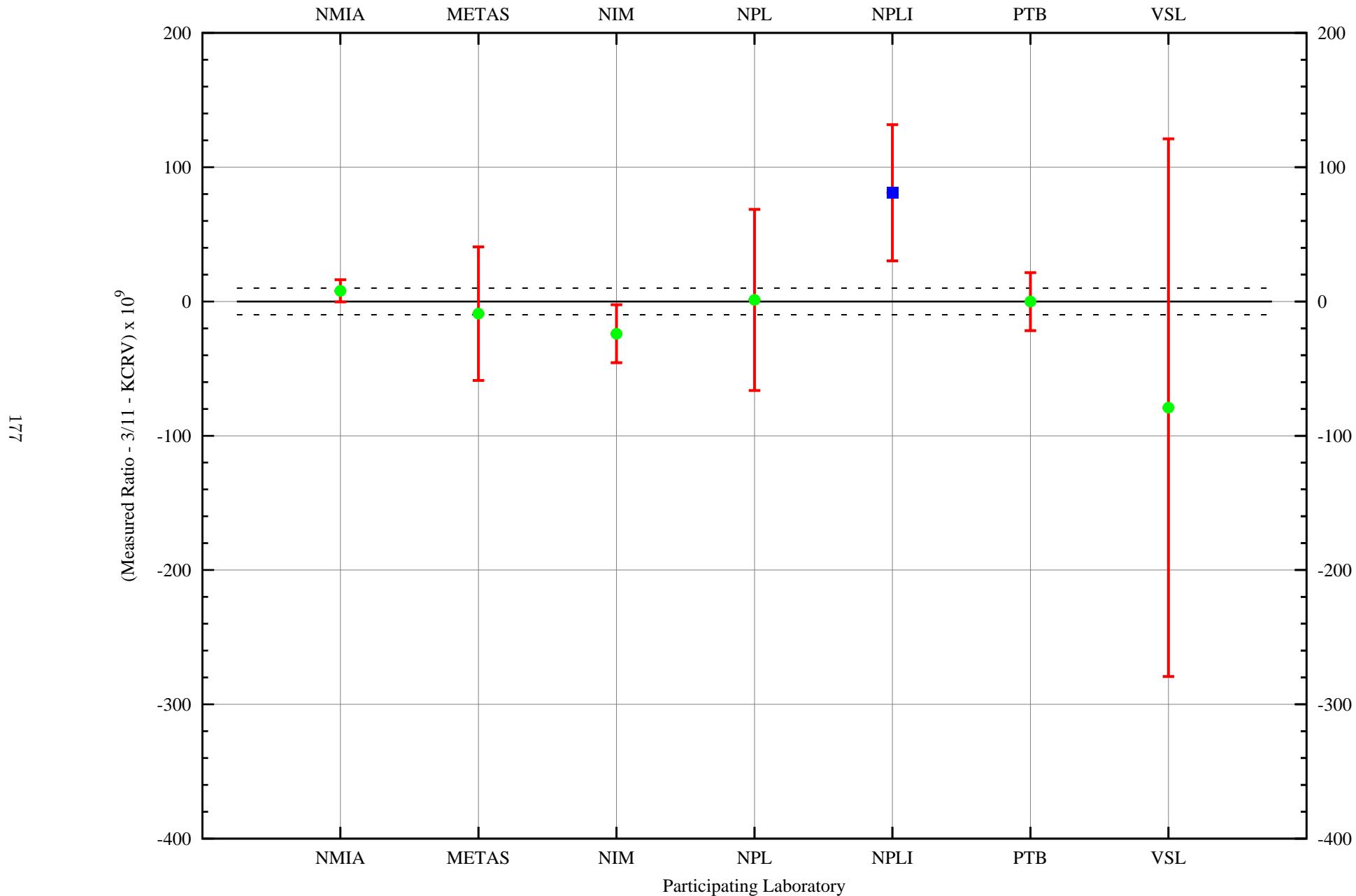
Table 166: Degree of equivalence to the KCRV for the Nominal Ratio 3/11 at 55 Hz, Quadrature Voltage Ratio (nV/V)

NMIA	METAS	NIM	NPL	NPLI	PTB	VSL
−2.3 ± 1.9	54 ± 107	−98 ± 24	9 ± 68	1088 ± 500	22 ± 20	108 ±1000

Table 167: Laboratory - Laboratory degree of equivalence for the Nominal Ratio 3/11 at 55 Hz, Quadrature Voltage Ratio (nV/V)

	NMIA	METAS	NIM	NPL	NPLI	PTB	VSL
NMIA		−56 ± 107	96 ± 25	−11 ± 69	−1090 ± 500	−24 ± 22	−110 ±1000
METAS	56 ± 107		152 ± 110	45 ± 127	−1034 ± 511	32 ± 109	−54 ±1006
NIM	−96 ± 25	−152 ± 110		−107 ± 73	−1186 ± 501	−120 ± 32	−206 ±1000
NPL	11 ± 69	−45 ± 127	107 ± 73		−1079 ± 505	−13 ± 72	−99 ±1002
NPLI	1090 ± 500	1034 ± 511	1186 ± 501	1079 ± 505		1066 ± 500	980 ±1118
PTB	24 ± 22	−32 ± 109	120 ± 32	13 ± 72	−1066 ± 500		−86 ±1000
VSL	110 ±1000	54 ±1006	206 ±1000	99 ±1002	−980 ±1118	86 ±1000	

Nominal Ratio: 3/11 at 55 Hz, Quadrature Voltage Ratio (KCRV $\pm$ 2σ) is (322.3 $\pm$ 6.0) x 10^{-9} of input
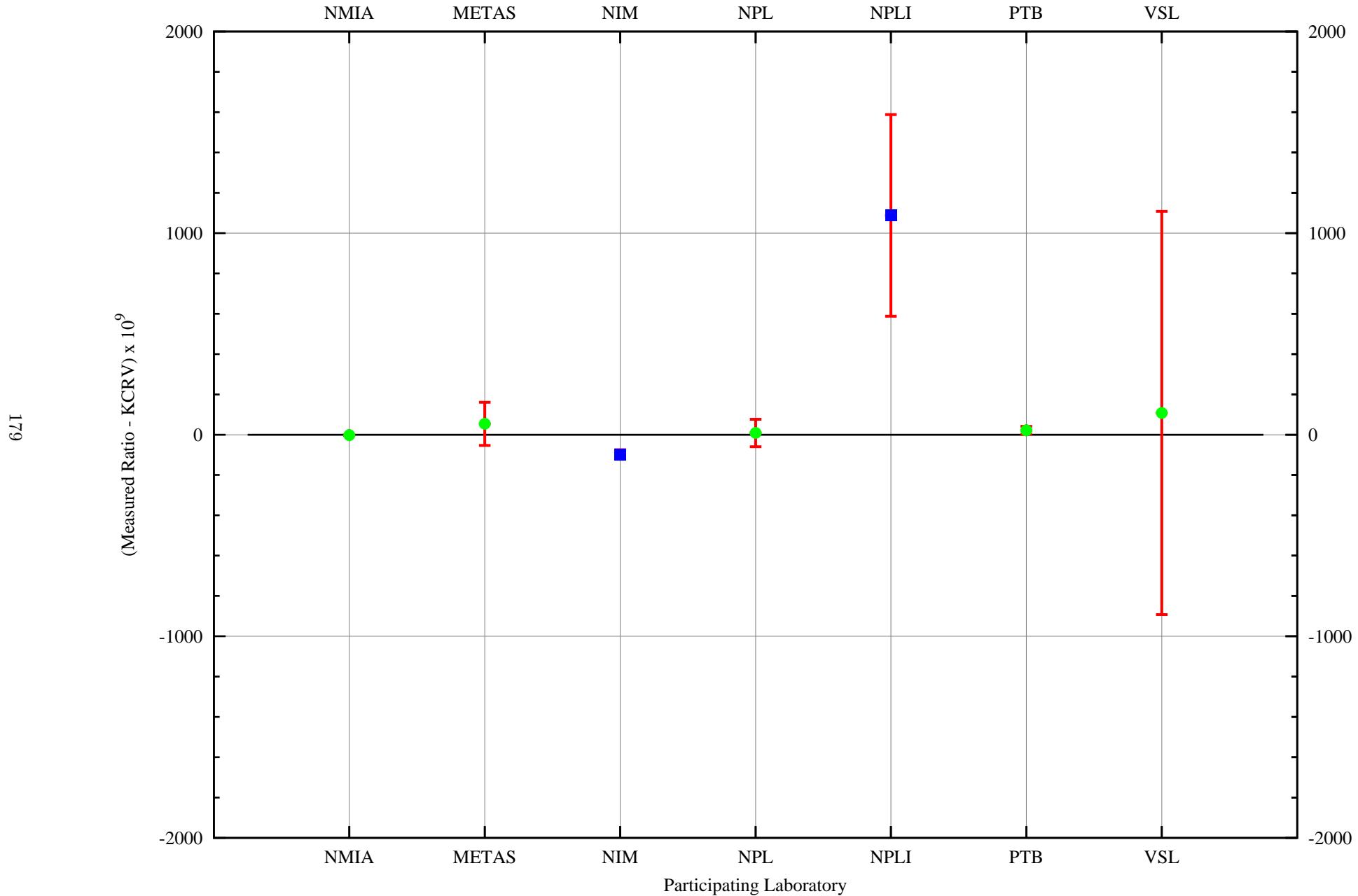
Table 168: Degree of equivalence to the KCRV for the Nominal Ratio 2/11 at 55 Hz, In-Phase Voltage Ratio (nV/V)

NMIA	METAS	NIM	NPL	NPLI	PTB	VSL
4.2 ± 6.9	−21 ± 49	−75 ± 17	−4 ± 67	133 ± 50	−8 ± 21	−93 ± 200

Table 169: Laboratory - Laboratory degree of equivalence for the Nominal Ratio 2/11 at 55 Hz, In-Phase Voltage Ratio (nV/V)

	NMIA	METAS	NIM	NPL	NPLI	PTB	VSL
NMIA		25 ± 51	79 ± 24	8 ± 69	−129 ± 53	12 ± 27	97 ± 201
METAS	−25 ± 51		54 ± 54	−17 ± 84	−154 ± 72	−13 ± 55	72 ± 207
NIM	−79 ± 24	−54 ± 54		−71 ± 71	−208 ± 56	−67 ± 31	18 ± 201
NPL	−8 ± 69	17 ± 84	71 ± 71		−137 ± 86	4 ± 72	89 ± 212
NPLI	129 ± 53	154 ± 72	208 ± 56	137 ± 86		141 ± 57	226 ± 207
PTB	−12 ± 27	13 ± 55	67 ± 31	−4 ± 72	−141 ± 57		85 ± 202
VSL	−97 ± 201	−72 ± 207	−18 ± 201	−89 ± 212	−226 ± 207	−85 ± 202	

Nominal Ratio: 2/11 at 55 Hz, In-Phase Voltage Ratio (KCRV $\pm$ 2σ) is (-299.0 $\pm$ 10.9) x 10^{-9} of input
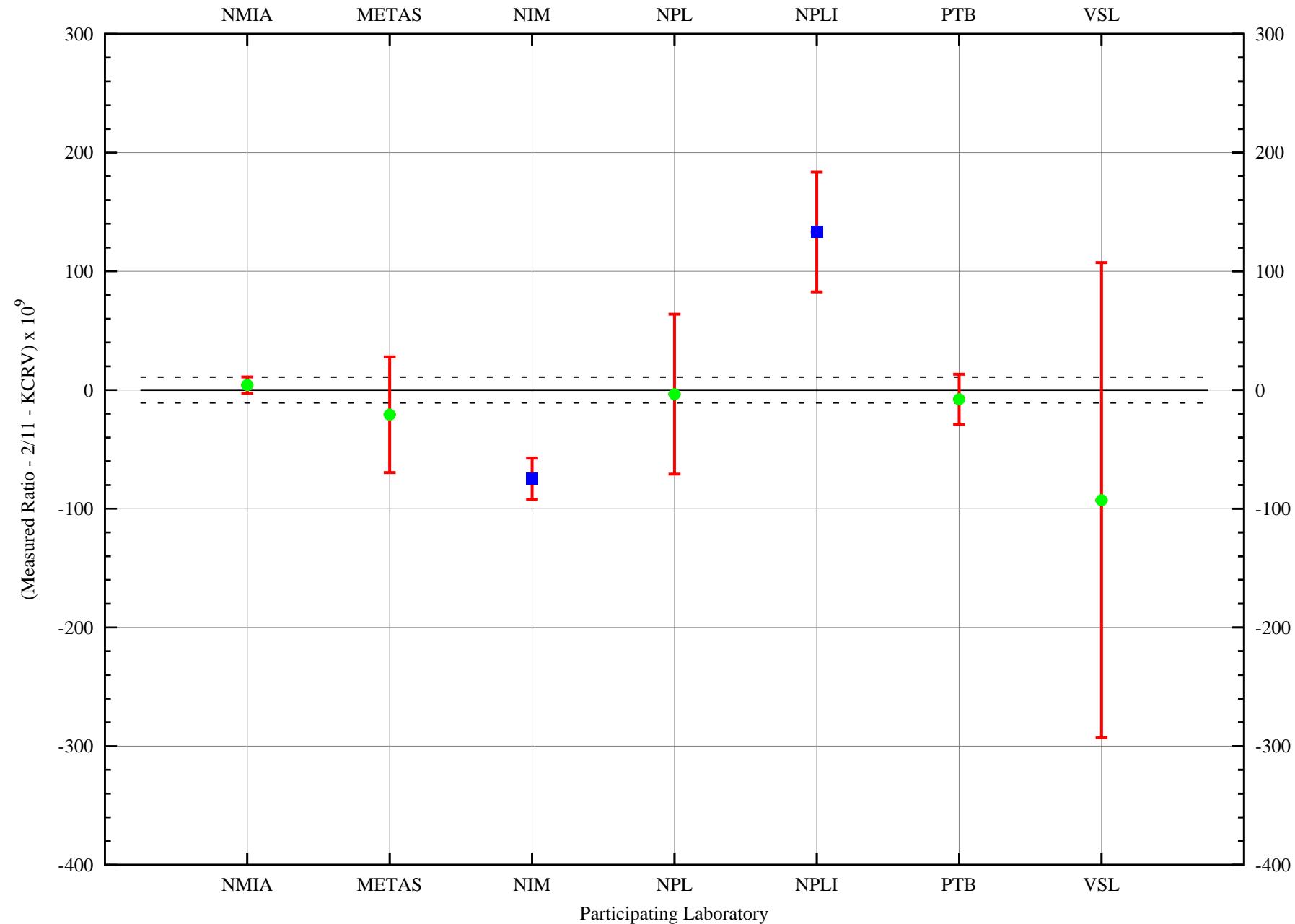
Table 170: Degree of equivalence to the KCRV for the Nominal Ratio 2/11 at 55 Hz, Quadrature Voltage Ratio (nV/V)

NMIA	METAS	NIM	NPL	NPLI	PTB	VSL
−2.1 ± 1.6	61 ± 97	−157 ± 32	11 ± 68	1240 ± 500	24 ± 20	170 ±1000

Table 171: Laboratory - Laboratory degree of equivalence for the Nominal Ratio 2/11 at 55 Hz, Quadrature Voltage Ratio (nV/V)

	NMIA	METAS	NIM	NPL	NPLI	PTB	VSL
NMIA		−63 ± 98	155 ± 33	−13 ± 69	−1242 ± 500	−26 ± 21	−172 ±1000
METAS	63 ± 98		218 ± 103	50 ± 119	−1179 ± 509	37 ± 100	−109 ±1005
NIM	−155 ± 33	−218 ± 103		−168 ± 76	−1397 ± 501	−181 ± 38	−327 ±1001
NPL	13 ± 69	−50 ± 119	168 ± 76		−1229 ± 505	−13 ± 72	−159 ±1002
NPLI	1242 ± 500	1179 ± 509	1397 ± 501	1229 ± 505		1216 ± 500	1070 ±1118
PTB	26 ± 21	−37 ± 100	181 ± 38	13 ± 72	−1216 ± 500		−146 ±1000
VSL	172 ±1000	109 ±1005	327 ±1001	159 ±1002	−1070 ±1118	146 ±1000	

Nominal Ratio: 2/11 at 55 Hz, Quadrature Voltage Ratio (KCRV $\pm$ 2σ) is (380.1 $\pm$ 5.4) x 10^{-9} of input
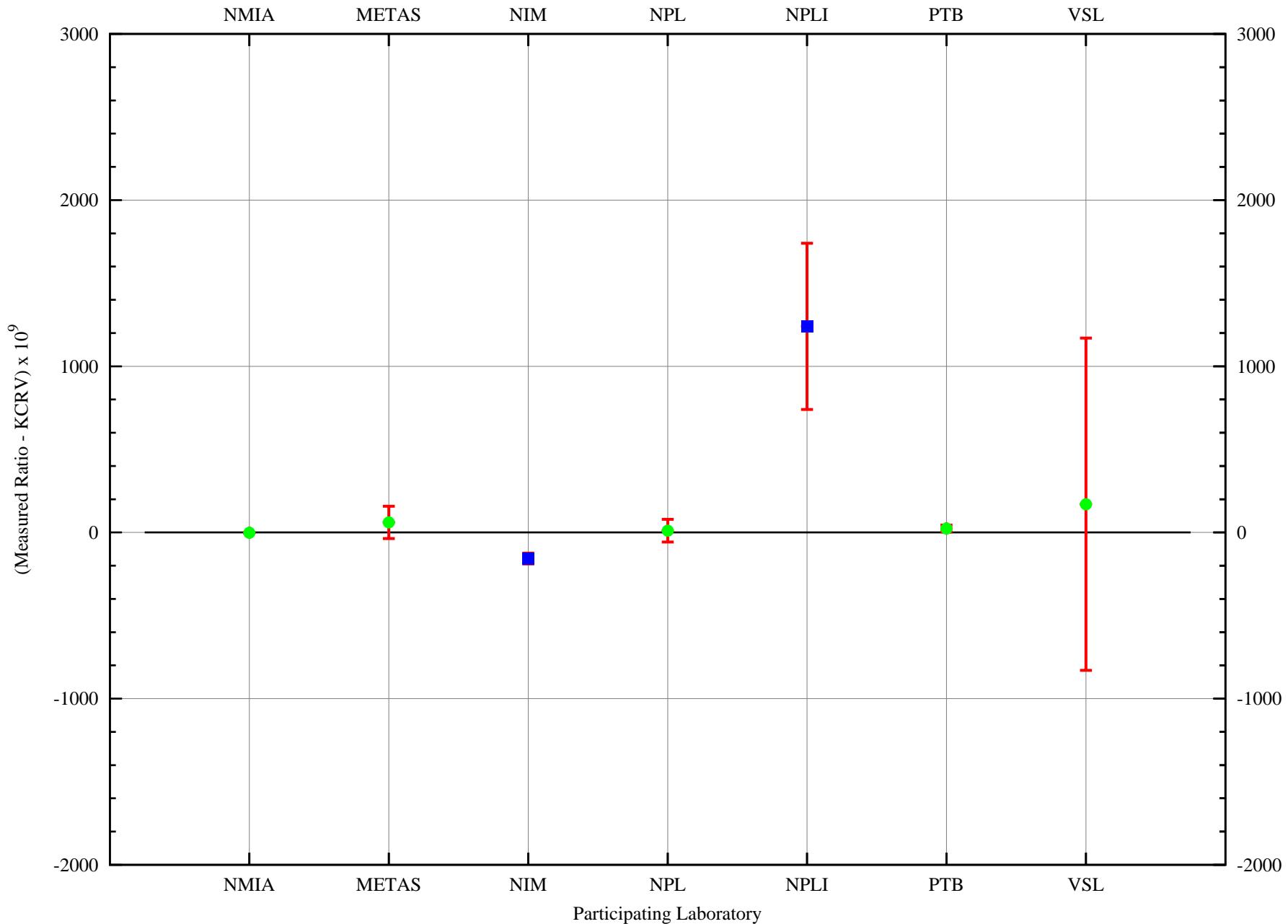
Table 172: Degree of equivalence to the KCRV for the Nominal Ratio 1/11 at 55 Hz, In-Phase Voltage Ratio (nV/V)

NMIA	METAS	NIM	NPL	NPLI	PTB	VSL
3.5 ± 6.9	−11 ± 43	−56 ± 17	−2 ± 67	133 ± 50	−8 ± 21	−82 ± 200

Table 173: Laboratory - Laboratory degree of equivalence for the Nominal Ratio 1/11 at 55 Hz, In-Phase Voltage Ratio (nV/V)

	NMIA	METAS	NIM	NPL	NPLI	PTB	VSL
NMIA		14 ± 46	59 ± 24	5 ± 69	−130 ± 53	11 ± 27	85 ± 201
METAS	−14 ± 46		45 ± 49	−9 ± 81	−144 ± 68	−3 ± 50	71 ± 205
NIM	−59 ± 24	−45 ± 49		−54 ± 71	−189 ± 56	−48 ± 31	26 ± 201
NPL	−5 ± 69	9 ± 81	54 ± 71		−135 ± 86	6 ± 72	80 ± 212
NPLI	130 ± 53	144 ± 68	189 ± 56	135 ± 86		141 ± 57	215 ± 207
PTB	−11 ± 27	3 ± 50	48 ± 31	−6 ± 72	−141 ± 57		74 ± 202
VSL	−85 ± 201	−71 ± 205	−26 ± 201	−80 ± 212	−215 ± 207	−74 ± 202	

Nominal Ratio: 1/11 at 55 Hz, In-Phase Voltage Ratio (KCRV ± 2σ) is (-259.4 ± 10.8) x 10^{-9} of input
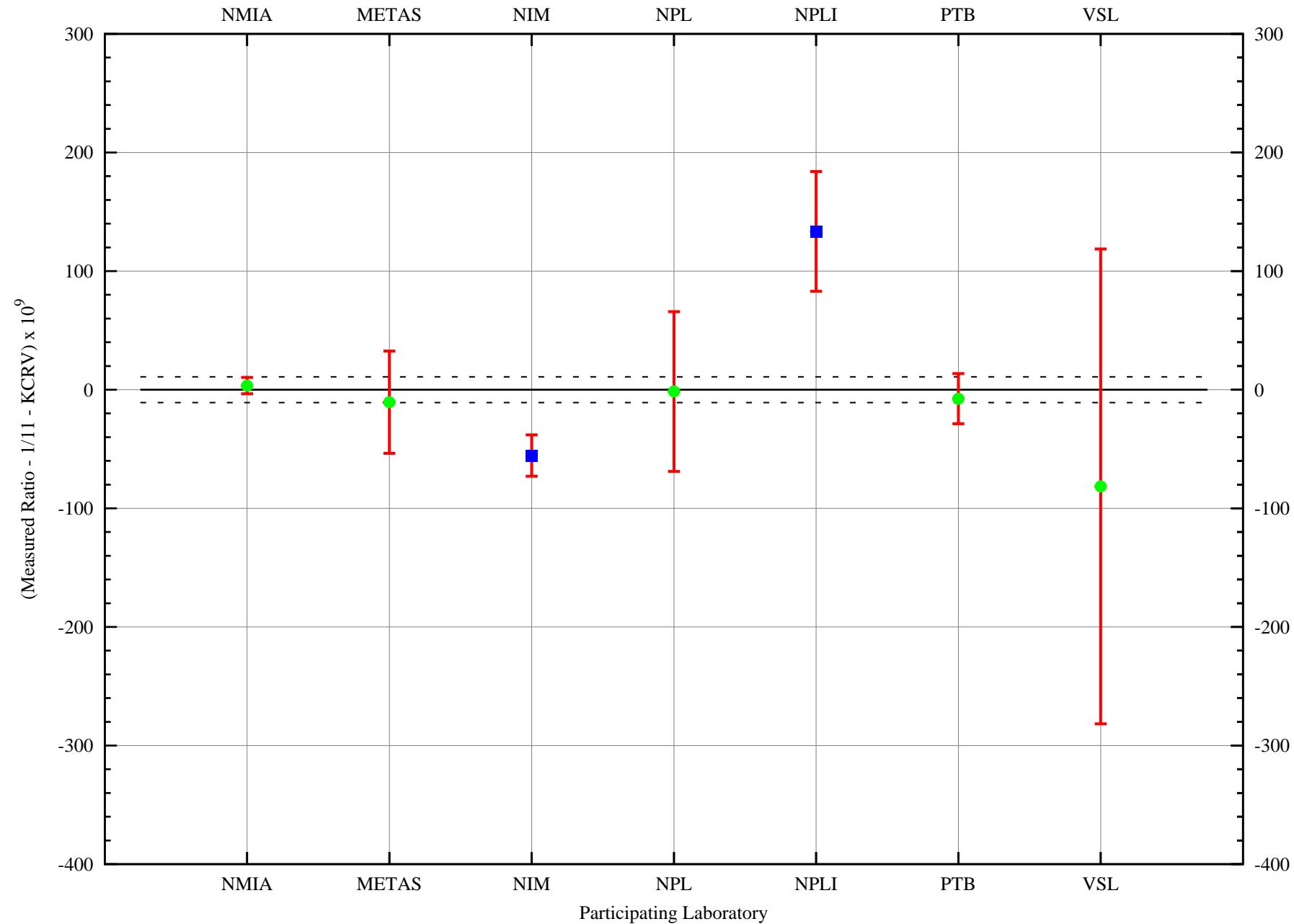
Table 174: Degree of equivalence to the KCRV for the Nominal Ratio 1/11 at 55 Hz, Quadrature Voltage Ratio (nV/V)

NMIA	METAS	NIM	NPL	NPLI	PTB	VSL
-1.6 $\pm$ 1.4	54 $\pm$ 86	$-146 \pm$ 24	9 $\pm$ 68	1026 $\pm$ 500	19 $\pm$ 20	146 $\pm$1000

Table 175: Laboratory - Laboratory degree of equivalence for the Nominal Ratio 1/11 at 55 Hz, Quadrature Voltage Ratio (nV/V)

	NMIA	METAS	NIM	NPL	NPLI	PTB	VSL
NMIA		$-56 \pm$ 86	144 $\pm$ 25	$-10 \pm$ 69	$-1028 \pm$ 500	$-21 \pm$ 21	$-148 \pm$1000
METAS	56 $\pm$ 86		200 $\pm$ 90	46 $\pm$ 110	$-972 \pm$ 507	35 $\pm$ 89	$-92 \pm$1004
NIM	$-144 \pm$ 25	$-200 \pm$ 90		$-154 \pm$ 73	$-1172 \pm$ 501	$-165 \pm$ 32	$-292 \pm$1000
NPL	10 $\pm$ 69	$-46 \pm$ 110	154 $\pm$ 73		$-1018 \pm$ 505	$-11 \pm$ 72	$-138 \pm$1002
NPLI	1028 $\pm$ 500	972 $\pm$ 507	1172 $\pm$ 501	1018 $\pm$ 505		1007 $\pm$ 500	880 $\pm$1118
PTB	21 $\pm$ 21	$-35 \pm$ 89	165 $\pm$ 32	11 $\pm$ 72	$-1007 \pm$ 500		$-127 \pm$1000
VSL	148 $\pm$1000	92 $\pm$1004	292 $\pm$1000	138 $\pm$1002	$-880 \pm$1118	127 $\pm$1000	

Nominal Ratio: 1/11 at 55 Hz, Quadrature Voltage Ratio (KCRV ± 2σ) is (323.6 ± 5.1) x 10^{-9} of input
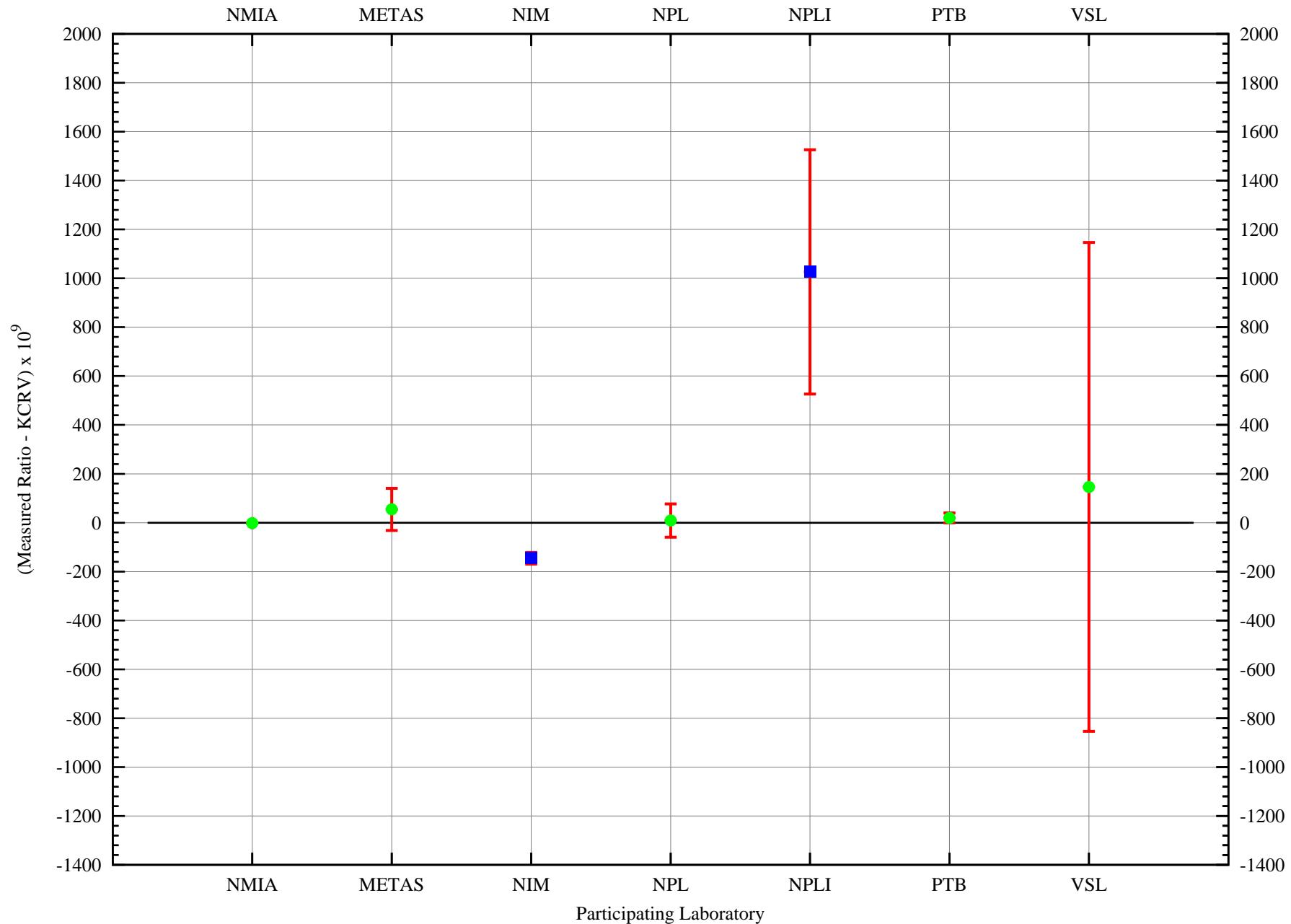
4 Raw Data Tables

This section contains the raw data files as submitted to the pilot laboratory. The fields have the following meanings:

Label This is the nominal ratio of the travelling standard.

Lab This is the original laboratory identifier. The identifier shown in the table caption is substituted for this in the rest of this document.

Date The date of the measurement.

Conn This identifies the type of connector used to connect to the travelling standard.

Volt This is the energisation voltage used in the measurement.

Freq This is the frequency of measurement

Temp This is the temperature of the travelling standard

Tempu This is the uncertainty of the temperature of the travelling standard

ipvr This is the measured in-phase voltage ratio

ipvd This is the number of degrees of freedom of the in-phase measurement

ipvu This is the expanded uncertainty of the in-phase measurement

ipk This is the k value of the in-phase measurement

qvr This is the measured quadrature voltage ratio

qdf This is is the number of degrees of freedom of the quadrature measurement

qvu This is the expanded uncertainty of the quadrature measurement

qk This is the k value of the quadrature measurement

Label	Lab	Date	Conn	Volt	Freq	Temp	Tempu	ipvr	ipvd	ipvu	ipk	qvr	qdf	qvu	qk
0.9	ETL	11/09/2000	BPO	10	1000	22.5	0.5	0.900000079	89	8.00E-09	2	-0.000000075	121	3.10E-08	2
0.8	ETL	11/09/2000	BPO	10	1000	22.5	0.5	0.800000093	83	8.00E-09	2	-0.000000118	113	2.90E-08	2
0.7	ETL	11/09/2000	BPO	10	1000	22.5	0.5	0.700000086	43	9.00E-09	2	-0.000000148	102	2.70E-08	2
0.6	ETL	11/09/2000	BPO	10	1000	22.5	0.5	0.600000055	54	7.00E-09	2	-0.000000145	88	2.40E-08	2
0.5	ETL	11/09/2000	BPO	10	1000	22.5	0.5	0.500000017	60	5.00E-09	2	-0.000000143	69	2.10E-08	2
0.4	ETL	11/09/2000	BPO	10	1000	22.5	0.5	0.399999978	43	4.00E-09	2	-0.000000106	53	1.90E-08	2
0.3	ETL	11/09/2000	BPO	10	1000	22.5	0.5	0.299999954	33	4.00E-09	2	-0.000000058	38	1.60E-08	2
0.2	ETL	11/09/2000	BPO	10	1000	22.5	0.5	0.199999947	21	3.00E-09	2.1	-0.000000019	23	1.30E-08	2.1
0.1	ETL	11/09/2000	BPO	10	1000	22.5	0.5	0.099999949	10	2.00E-09	2.2	0.000000012	9	9.00E-09	2.3
0.01	ETL	14/09/2000	BPO	10	1000	22.5	0.5	0.009998763	29	8.20E-08	2.1	0.000000487	34	1.60E-07	2
10/11	ETL	13/09/2000	BPO	10	1000	22.5	0.5	0.909090973	106	8.00E-09	2	-0.000000133	125	3.20E-08	2
9/11	ETL	13/09/2000	BPO	10	1000	22.5	0.5	0.818181846	98	7.00E-09	2	-0.000000188	117	2.90E-08	2
8/11	ETL	13/09/2000	BPO	10	1000	22.5	0.5	0.727272739	89	7.00E-09	2	-0.000000218	109	2.70E-08	2
7/11	ETL	13/09/2000	BPO	10	1000	22.5	0.5	0.636363628	79	6.00E-09	2	-0.000000201	96	2.50E-08	2
6/11	ETL	13/09/2000	BPO	10	1000	22.5	0.5	0.545454528	67	6.00E-09	2	-0.000000172	82	2.30E-08	2
5/11	ETL	13/09/2000	BPO	10	1000	22.5	0.5	0.454545455	54	5.00E-09	2	-0.000000141	66	2.10E-08	2
4/11	ETL	13/09/2000	BPO	10	1000	22.5	0.5	0.363636335	40	4.00E-09	2	-0.000000055	49	1.80E-08	2
3/11	ETL	13/09/2000	BPO	10	1000	22.5	0.5	0.272727251	28	4.00E-09	2.1	-0.000000007	33	1.50E-08	2
2/11	ETL	13/09/2000	BPO	10	1000	22.5	0.5	0.181818137	19	3.00E-09	2.1	0.000000047	20	1.20E-08	2.1
1/11	ETL	13/09/2000	BPO	10	1000	22.5	0.5	0.090909041	9	2.00E-09	2.3	0.000000064	9	9.00E-09	2.3

Table 176: Contents of the raw data file from NMIJ

Label	Lab	Date	Conn	Volt	Freq	Temp	Tempu	ipvr	ipvd	ipvu	ipk	qvr	qdf	qvu	qk
0.9	CEM	20/06/2002	BPO	10	1000	23	0.3	0.900000045	375	5.00E-08	2	-0.000000068	43	5.00E-08	2.1
0.8	CEM	20/06/2002	BPO	10	1000	23	0.3	0.800000045	327	5.00E-08	2	-0.000000104	29	5.00E-08	2.1
0.7	CEM	20/06/2002	BPO	10	1000	23	0.3	0.700000033	291	5.00E-08	2	-0.000000129	32	5.00E-08	2.1
0.6	CEM	20/06/2002	BPO	10	1000	23	0.3	0.600000004	199	5.00E-08	2	-0.000000122	52	5.00E-08	2.1
0.5	CEM	20/06/2002	BPO	10	1000	23	0.3	0.499999975	113	5.00E-08	2	-0.000000117	62	5.00E-08	2.1
0.4	CEM	20/06/2002	BPO	10	1000	23	0.3	0.399999945	159	5.00E-08	2	-0.000000079	38	5.00E-08	2.1
0.3	CEM	20/06/2002	BPO	10	1000	23	0.3	0.299999931	248	5.00E-08	2	-0.000000031	47	5.00E-08	2.1
0.2	CEM	20/06/2002	BPO	10	1000	23	0.3	0.199999934	261	5.00E-08	2	0.000000004	69	5.00E-08	2.1
0.1	CEM	20/06/2002	BPO	10	1000	23	0.3	0.099999944	391	5.00E-08	2	0.000000025	88	5.00E-08	2.1
0.01	CEM	17/01/2003	BPO	10	1000	23	0.3	0.009998827	36	5.00E-08	2.1	0.000000413	208	5.00E-08	2
10/11	CEM	17/01/2003	BPO	10	1000	23	0.3	0.90909096	211	5.00E-08	2	-0.000000114	55	5.00E-08	2.1
9/11	CEM	17/01/2003	BPO	10	1000	23	0.3	0.81818182	216	5.00E-08	2	-0.000000157	69	5.00E-08	2.1
8/11	CEM	17/01/2003	BPO	10	1000	23	0.3	0.72727272	168	5.00E-08	2	-0.000000176	60	5.00E-08	2.1
7/11	CEM	17/01/2003	BPO	10	1000	23	0.3	0.6363636	318	5.00E-08	2	-0.000000151	58	5.00E-08	2.1
6/11	CEM	17/01/2003	BPO	10	1000	23	0.3	0.5454545	324	5.00E-08	2	-0.000000118	75	5.00E-08	2.1
5/11	CEM	17/01/2003	BPO	10	1000	23	0.3	0.45454542	382	5.00E-08	2	-0.000000087	73	5.00E-08	2.1
4/11	CEM	17/01/2003	BPO	10	1000	23	0.3	0.363636302	400	5.00E-08	2	-0.000000006	105	5.00E-08	2
3/11	CEM	17/01/2003	BPO	10	1000	23	0.3	0.272727219	400	5.00E-08	2	0.000000035	136	5.00E-08	2
2/11	CEM	17/01/2003	BPO	10	1000	23	0.3	0.181818113	400	5.00E-08	2	0.000000078	188	5.00E-08	2
1/11	CEM	17/01/2003	BPO	10	1000	23	0.3	0.090909027	400	5.00E-08	2	0.00000008	165	5.00E-08	2

Table 177: Contents of the raw data file from CEM

Label	Lab	Date	Conn	Volt	Freq	Temp	Tempu	ipvr	ipvd	ipvu	ipk	qvr	qdf	qvu	qk
0.9	CSIRO	2001-08-17	BPO	10.0	1000.05	20.8	0.1	0.900000058	3	5E-10	3.307	-0.000000069	3	2E-10	3.307
0.8	CSIRO	2001-08-17	BPO	10.0	1000.05	20.8	0.1	0.800000067	3	6E-10	3.307	-0.000000107	3	3E-10	3.307
0.7	CSIRO	2001-08-17	BPO	10.0	1000.05	20.8	0.1	0.700000063	3	6E-10	3.307	-0.000000133	3	1E-10	3.307
0.6	CSIRO	2001-08-17	BPO	10.0	1000.05	20.8	0.1	0.600000039	3	4E-10	3.307	-0.000000131	3	2E-10	3.307
0.5	CSIRO	2001-08-17	BPO	10.0	1000.05	20.8	0.1	0.500000012	3	2E-10	3.307	-0.000000130	3	3E-10	3.307
0.4	CSIRO	2001-08-17	BPO	10.0	1000.05	20.8	0.1	0.399999981	3	1E-10	3.307	-0.000000095	3	2E-10	3.307
0.3	CSIRO	2001-08-17	BPO	10.0	1000.05	20.8	0.1	0.299999962	3	2E-10	3.307	-0.000000051	3	5E-10	3.307
0.2	CSIRO	2001-08-17	BPO	10.0	1000.05	20.8	0.1	0.199999955	3	2E-10	3.307	-0.000000015	3	6E-10	3.307
0.1	CSIRO	2001-08-17	BPO	10.0	1000.05	20.8	0.1	0.099999956	3	1E-10	3.307	0.000000012	3	3E-10	3.307
0.01	CSIRO	2001-08-22	BPO	10.0	1000.05	20.2	0.1	0.009998842	5	3E-10	2.649	0.000000423	5	2E-10	2.649
10/11	CSIRO	2001-08-02	BPO	10.0	1000.05	20.6	0.1	0.909090962	3	4E-10	3.307	-0.000000121	3	2E-10	3.307
9/11	CSIRO	2001-08-02	BPO	10.0	1000.05	20.6	0.1	0.818181841	3	2E-10	3.307	-0.000000175	3	2E-10	3.307
8/11	CSIRO	2001-08-02	BPO	10.0	1000.05	20.6	0.1	0.727272737	3	1E-10	3.307	-0.000000202	3	2E-10	3.307
7/11	CSIRO	2001-08-02	BPO	10.0	1000.05	20.6	0.1	0.636363628	3	4E-10	3.307	-0.000000185	3	5E-10	3.307
6/11	CSIRO	2001-08-02	BPO	10.0	1000.05	20.6	0.1	0.545454527	3	4E-10	3.307	-0.000000156	3	5E-10	3.307
5/11	CSIRO	2001-08-02	BPO	10.0	1000.05	20.6	0.1	0.454545449	3	3E-10	3.307	-0.000000124	3	4E-10	3.307
4/11	CSIRO	2001-08-02	BPO	10.0	1000.05	20.6	0.1	0.363636330	3	2E-10	3.307	-0.000000044	3	4E-10	3.307
3/11	CSIRO	2001-08-02	BPO	10.0	1000.05	20.6	0.1	0.272727244	3	3E-10	3.307	0.000000002	3	3E-10	3.307
2/11	CSIRO	2001-08-02	BPO	10.0	1000.05	20.6	0.1	0.181818134	3	2E-10	3.307	0.000000050	3	3E-10	3.307
1/11	CSIRO	2001-08-02	BPO	10.0	1000.05	20.6	0.1	0.090909041	3	1E-10	3.307	0.000000062	3	3E-10	3.307

Table 178: Contents of the raw data file from NMIA - Part 1

Label	Lab	Date	Conn	Volt	Freq	Temp	Tempu	ipvr	ipvd	ipvu	ipk	qvr	qdf	qvu	qk
0.9	CSIRO	2001-08-14	BPO	3.0	55.00	20.9	0.1	0.899999959	2	3E-10	4.527	0.000000121	2	7E-10	4.527
0.8	CSIRO	2001-08-14	BPO	3.0	55.00	20.9	0.1	0.799999904	2	5E-10	4.527	0.000000215	2	11E-10	4.527
0.7	CSIRO	2001-08-14	BPO	3.0	55.00	20.9	0.1	0.699999906	2	8E-10	4.527	0.000000214	2	11E-10	4.527
0.6	CSIRO	2001-08-14	BPO	3.0	55.00	20.9	0.1	0.599999878	2	10E-10	4.527	0.000000235	2	14E-10	4.527
0.5	CSIRO	2001-08-14	BPO	3.0	55.00	20.9	0.1	0.499999892	2	12E-10	4.527	0.000000200	2	9E-10	4.527
0.4	CSIRO	2001-08-14	BPO	3.0	55.00	20.9	0.1	0.399999849	2	13E-10	4.527	0.000000166	2	12E-10	4.527
0.3	CSIRO	2001-08-14	BPO	3.0	55.00	20.9	0.1	0.299999835	2	10E-10	4.527	0.000000176	2	9E-10	4.527
0.2	CSIRO	2001-08-14	BPO	3.0	55.00	20.9	0.1	0.199999852	2	8E-10	4.527	0.000000153	2	9E-10	4.527
0.1	CSIRO	2001-08-14	BPO	3.0	55.00	20.9	0.1	0.099999874	2	5E-10	4.527	0.000000128	2	6E-10	4.527
0.01	CSIRO	2001-08-16	BPO	3.0	55.00	20.8	0.2	0.009996186	7	21E-10	2.430	0.000003850	7	190E-10	2.430
10/11	CSIRO	2001-08-09	BPO	3.0	55.10	20.9	0.1	0.909091038	4	10E-10	2.869	-0.000000145	4	13E-10	2.869
9/11	CSIRO	2001-08-09	BPO	3.0	55.10	20.9	0.1	0.818181837	4	44E-10	2.869	-0.000000031	4	22E-10	2.869
8/11	CSIRO	2001-08-09	BPO	3.0	55.10	20.9	0.1	0.727272714	4	33E-10	2.869	-0.000000006	4	31E-10	2.869
7/11	CSIRO	2001-08-09	BPO	3.0	55.10	20.9	0.1	0.636363537	4	43E-10	2.869	0.000000095	4	41E-10	2.869
6/11	CSIRO	2001-08-09	BPO	3.0	55.10	20.9	0.1	0.545454399	4	31E-10	2.869	0.000000157	4	42E-10	2.869
5/11	CSIRO	2001-08-09	BPO	3.0	55.10	20.9	0.1	0.454545331	4	25E-10	2.869	0.000000149	4	46E-10	2.869
4/11	CSIRO	2001-08-09	BPO	3.0	55.10	20.9	0.1	0.363636105	4	18E-10	2.869	0.000000325	4	71E-10	2.869
3/11	CSIRO	2001-08-09	BPO	3.0	55.10	20.9	0.1	0.272727027	4	17E-10	2.869	0.000000320	4	51E-10	2.869
2/11	CSIRO	2001-08-09	BPO	3.0	55.10	20.9	0.1	0.181817887	4	16E-10	2.869	0.000000378	4	31E-10	2.869
1/11	CSIRO	2001-08-09	BPO	3.0	55.10	20.9	0.1	0.090908835	4	12E-10	2.869	0.000000322	4	17E-10	2.869

Table 179: Contents of the raw data file from NMIA - Part 2

Label	Lab	Date	Conn	Volt	Freq	Temp	Tempu	ipvr	ipvd	ipvu	ipk	qvr	qdf	qvu	qk
0.9	IEN	2002-05-16	BPO	10	1000	23	0.5	0.900000064	16.9	1.2E-08	2.12	-0.000000065	23.1	9.9E-09	2.07
0.8	IEN	2002-05-16	BPO	10	1000	23	0.5	0.800000076	17.4	1.4E-08	2.11	-0.000000104	51.2	1.0E-08	2.01
0.7	IEN	2002-05-16	BPO	10	1000	23	0.5	0.700000062	18.0	1.4E-08	2.11	-0.000000112	59.2	1.3E-08	2.00
0.6	IEN	2002-05-16	BPO	10	1000	23	0.5	0.600000033	19.9	1.1E-08	2.09	-0.000000121	76.9	1.4E-08	1.99
0.5	IEN	2002-05-16	BPO	10	1000	23	0.5	0.500000004	27.7	7.4E-09	2.05	-0.000000120	101.2	1.4E-08	1.98
0.4	IEN	2002-05-16	BPO	10	1000	23	0.5	0.399999976	30.2	6.7E-09	2.04	-0.000000093	53.1	1.5E-08	2.01
0.3	IEN	2002-05-16	BPO	10	1000	23	0.5	0.299999955	23.4	7.7E-09	2.07	-0.000000036	62.9	1.2E-08	2.00
0.2	IEN	2002-05-16	BPO	10	1000	23	0.5	0.199999951	20.7	7.4E-09	2.09	-0.000000005	38.1	1.1E-08	2.02
0.1	IEN	2002-05-16	BPO	10	1000	23	0.5	0.099999963	17.7	7.0E-09	2.11	-0.000000001	31.0	7.1E-09	2.04
0.01	IEN	2002-05-16	BPO	10	1000	23	0.5	0.009998761	232.4	7.8E-08	1.97	0.000000572	11.9	5.6E-08	2.20
10/11	IEN	2002-05-16	BPO	10	1000	23	0.5	0.909090967	15.8	7.6E-09	2.13	-0.000000127	48.0	6.7E-09	2.01
9/11	IEN	2002-05-16	BPO	10	1000	23	0.5	0.818181843	18.3	7.0E-09	2.10	-0.000000176	110.2	9.4E-09	1.98
8/11	IEN	2002-05-16	BPO	10	1000	23	0.5	0.727272739	21.5	7.3E-09	2.08	-0.000000197	440.1	1.1E-08	1.97
7/11	IEN	2002-05-16	BPO	10	1000	23	0.5	0.636363641	23.2	7.9E-09	2.07	-0.000000209	237.2	1.3E-08	1.97
6/11	IEN	2002-05-16	BPO	10	1000	23	0.5	0.545454527	33.3	6.6E-09	2.03	-0.000000145	804.3	1.2E-08	1.96
5/11	IEN	2002-05-16	BPO	10	1000	23	0.5	0.454545457	18.4	1.1E-08	2.10	-0.000000123	236.8	1.3E-08	1.97
4/11	IEN	2002-05-16	BPO	10	1000	23	0.5	0.363636336	18.0	1.1E-08	2.11	-0.000000040	100.4	1.3E-08	1.98
3/11	IEN	2002-05-16	BPO	10	1000	23	0.5	0.272727254	17.0	1.1E-08	2.11	0.000000004	48.6	1.3E-08	2.01
2/11	IEN	2002-05-16	BPO	10	1000	23	0.5	0.181818136	18.9	7.0E-09	2.10	0.000000056	39.5	1.1E-08	2.02
1/11	IEN	2002-05-16	BPO	10	1000	23	0.5	0.090909052	14.9	9.3E-09	2.14	0.000000047	17.3	1.3E-08	2.11

Table 180: Contents of the raw data file from IEN

Label	Lab	Date	Conn	Volt	Freq	Temp	Tempu	ipvr	ipvd	ipvu	ipk	qvr	qdf	qvu	qk
0.9	KRISS	2002.03.30	BPO	10	1000.00	23.0	0.5	0.900000068	40	1.60E-08	2.0	-0.000000073	40	2.40E-08	2.0
0.8	KRISS	2002.03.30	BPO	10	1000.00	23.0	0.5	0.800000080	40	1.60E-08	2.0	-0.000000113	40	2.40E-08	2.0
0.7	KRISS	2002.03.30	BPO	10	1000.00	23.0	0.5	0.700000074	40	1.60E-08	2.0	-0.000000141	40	2.40E-08	2.0
0.6	KRISS	2002.03.30	BPO	10	1000.00	23.0	0.5	0.600000046	40	1.60E-08	2.0	-0.000000139	40	2.40E-08	2.0
0.5	KRISS	2002.03.30	BPO	10	1000.00	23.0	0.5	0.500000013	40	1.60E-08	2.0	-0.000000136	40	2.40E-08	2.0
0.4	KRISS	2002.03.30	BPO	10	1000.00	23.0	0.5	0.399999979	40	1.60E-08	2.0	-0.000000101	40	2.40E-08	2.0
0.3	KRISS	2002.03.30	BPO	10	1000.00	23.0	0.5	0.299999959	40	1.60E-08	2.0	-0.000000057	40	2.40E-08	2.0
0.2	KRISS	2002.03.30	BPO	10	1000.00	23.0	0.5	0.199999953	40	1.60E-08	2.0	-0.000000021	40	2.40E-08	2.0
0.1	KRISS	2002.03.30	BPO	10	1000.00	23.0	0.5	0.099999954	40	1.60E-08	2.0	0.000000008	40	2.40E-08	2.0
0.01	KRISS	2002.03.30	BPO	10	1000.00	23.0	0.5	0.009998801	40	2.00E-08	2.0	0.000000442	40	3.00E-08	2.0
10/11	KRISS	2002.03.30	BPO	10	1000.00	23.0	0.5	0.909090968	40	1.80E-08	2.0	-0.000000130	40	2.40E-08	2.0
9/11	KRISS	2002.03.30	BPO	10	1000.00	23.0	0.5	0.818181843	40	1.80E-08	2.0	-0.000000191	40	2.40E-08	2.0
8/11	KRISS	2002.03.30	BPO	10	1000.00	23.0	0.5	0.727272739	40	1.80E-08	2.0	-0.000000226	40	2.40E-08	2.0
7/11	KRISS	2002.03.30	BPO	10	1000.00	23.0	0.5	0.636363628	40	1.80E-08	2.0	-0.000000218	40	2.40E-08	2.0
6/11	KRISS	2002.03.30	BPO	10	1000.00	23.0	0.5	0.545454526	40	1.80E-08	2.0	-0.000000191	40	2.40E-08	2.0
5/11	KRISS	2002.03.30	BPO	10	1000.00	23.0	0.5	0.454545448	40	1.80E-08	2.0	-0.000000159	40	2.40E-08	2.0
4/11	KRISS	2002.03.30	BPO	10	1000.00	23.0	0.5	0.363636329	40	1.80E-08	2.0	-0.000000066	40	2.40E-08	2.0
3/11	KRISS	2002.03.30	BPO	10	1000.00	23.0	0.5	0.272727245	40	1.80E-08	2.0	-0.000000008	40	2.40E-08	2.0
2/11	KRISS	2002.03.30	BPO	10	1000.00	23.0	0.5	0.181818134	40	1.80E-08	2.0	0.000000053	40	2.40E-08	2.0
1/11	KRISS	2002.03.30	BPO	10	1000.00	23.0	0.5	0.090909040	40	1.80E-08	2.0	0.000000062	40	2.40E-08	2.0

Table 181: Contents of the raw data file from KRISS

Label	Lab	Date	Conn	Volt	Freq	Temp	Tempu	ipvr	ipvd	ipvu	ipk	qvr	qdf	qvu	qk
0.9	LCIE	25/02/2002	BPA	10	1000	23	1	0.900000146	500	2.60E-08	2	-0.000008388	500	2.60E-08	2
0.8	LCIE	25/02/2002	BPA	10	1000	23	1	0.800000208	500	2.90E-08	2	-0.000012177	500	2.90E-08	2
0.7	LCIE	25/02/2002	BPA	10	1000	23	1	0.700000232	500	3.30E-08	2	-0.000011165	500	3.30E-08	2
0.6	LCIE	25/02/2002	BPA	10	1000	23	1	0.600000218	500	3.50E-08	2	-0.000007725	500	3.50E-08	2
0.5	LCIE	25/02/2002	BPA	10	1000	23	1	0.500000085	500	3.60E-08	2	-0.000003423	500	3.60E-08	2
0.4	LCIE	25/02/2002	BPA	10	1000	23	1	0.399999919	500	3.50E-08	2	0.000002079	500	3.50E-08	2
0.3	LCIE	25/02/2002	BPA	10	1000	23	1	0.299999826	500	3.30E-08	2	0.000007409	500	3.30E-08	2
0.2	LCIE	25/02/2002	BPA	10	1000	23	1	0.199999863	500	2.90E-08	2	0.000009865	500	2.90E-08	2
0.1	LCIE	25/02/2002	BPA	10	1000	23	1	0.099999967	500	2.60E-08	2	0.000007888	500	2.60E-08	2
0.01	LCIE	25/02/2002	BPA	10	1000	23	1	0.010001267	500	1.10E-08	2	0.000000949	500	1.10E-08	2
10/11	LCIE	25/02/2002	BPA	10	1000	23	1	0.909091071	500	3.10E-08	2	-0.000010026	500	6.90E-07	2
9/11	LCIE	25/02/2002	BPA	10	1000	23	1	0.818182102	500	3.40E-08	2	-0.000014497	500	6.90E-07	2
8/11	LCIE	25/02/2002	BPA	10	1000	23	1	0.72727306	500	3.70E-08	2	-0.000014733	500	6.90E-07	2
7/11	LCIE	25/02/2002	BPA	10	1000	23	1	0.636363934	500	3.90E-08	2	-0.000012414	500	6.90E-07	2
6/11	LCIE	25/02/2002	BPA	10	1000	23	1	0.545454721	500	4.00E-08	2	-0.000008812	500	6.90E-07	2
5/11	LCIE	25/02/2002	BPA	10	1000	23	1	0.454545419	500	4.00E-08	2	-0.000004212	500	6.90E-07	2
4/11	LCIE	25/02/2002	BPA	10	1000	23	1	0.363636201	500	3.90E-08	2	0.000000953	500	6.90E-07	2
3/11	LCIE	25/02/2002	BPA	10	1000	23	1	0.27272701	500	3.70E-08	2	0.000005336	500	6.90E-07	2
2/11	LCIE	25/02/2002	BPA	10	1000	23	1	0.181817966	500	3.40E-08	2	0.000007111	500	6.90E-07	2
1/11	LCIE	25/02/2002	BPA	10	1000	23	1	0.090908979	500	3.50E-08	2	0.000004953	500	3.50E-08	2

Table 182: Contents of the raw data file from LCIE

Label	Lab	Date	Conn	Volt	Freq	Temp	Tempu	ipvr	ipvd	ipvu	ipk	qvr	qdf	qvu	qk
0.9	metas	14/11/2000	BPO	10	1000	20.5	0.3	0.90000006	26	2.70E-08	2.1	-0.000000068	43	7.10E-08	2.1
0.8	metas	14/11/2000	BPO	10	1000	20.5	0.3	0.800000068	27	3.50E-08	2.1	-0.000000103	31	1.13E-07	2.1
0.7	metas	14/11/2000	BPO	10	1000	20.5	0.3	0.700000062	29	3.50E-08	2.1	-0.000000127	21	1.34E-07	2.1
0.6	metas	14/11/2000	BPO	10	1000	20.5	0.3	0.600000034	25	3.30E-08	2.1	-0.000000122	15	1.42E-07	2.2
0.5	metas	14/11/2000	BPO	10	1000	20.5	0.3	0.500000003	17	3.00E-08	2.2	-0.000000118	11	1.41E-07	2.3
0.4	metas	14/11/2000	BPO	10	1000	20.5	0.3	0.399999972	17	2.90E-08	2.2	-0.000000082	15	1.42E-07	2.2
0.3	metas	14/11/2000	BPO	10	1000	20.5	0.3	0.299999952	21	2.60E-08	2.1	-0.000000037	22	1.34E-07	2.1
0.2	metas	14/11/2000	BPO	10	1000	20.5	0.3	0.199999948	32	2.20E-08	2.1	-0.000000003	31	1.13E-07	2.1
0.1	metas	14/11/2000	BPO	10	1000	20.5	0.3	0.099999951	64	1.60E-08	2.1	0.00000002	44	7.10E-08	2.1
0.01	metas	14/11/2000	BPO	10	1000	20.5	0.3	0.009998761	47	6.80E-08	2.1	0.00000049	29	8.90E-08	2.1
10/11	metas	14/11/2000	BPO	10	1000	20.5	0.3	0.909090967	58	1.50E-08	2.1	-0.000000124	28	5.20E-08	2.1
9/11	metas	14/11/2000	BPO	10	1000	20.5	0.3	0.818181842	33	1.90E-08	2.1	-0.000000174	17	8.10E-08	2.2
8/11	metas	14/11/2000	BPO	10	1000	20.5	0.3	0.727272737	22	2.50E-08	2.1	-0.000000198	15	1.13E-07	2.2
7/11	metas	14/11/2000	BPO	10	1000	20.5	0.3	0.636363627	18	2.90E-08	2.2	-0.000000177	11	1.31E-07	2.3
6/11	metas	14/11/2000	BPO	10	1000	20.5	0.3	0.545454526	17	3.10E-08	2.2	-0.000000147	11	1.43E-07	2.3
5/11	metas	14/11/2000	BPO	10	1000	20.5	0.3	0.454545449	18	3.20E-08	2.2	-0.000000116	15	1.51E-07	2.2
4/11	metas	14/11/2000	BPO	10	1000	20.5	0.3	0.363636328	20	3.20E-08	2.1	-0.000000033	21	1.53E-07	2.1
3/11	metas	14/11/2000	BPO	10	1000	20.5	0.3	0.272727243	24	3.00E-08	2.1	0.000000011	29	1.45E-07	2.1
2/11	metas	14/11/2000	BPO	10	1000	20.5	0.3	0.18181813	29	2.50E-08	2.1	0.000000058	39	1.19E-07	2.1
1/11	metas	14/11/2000	BPO	10	1000	20.5	0.3	0.090909037	42	1.80E-08	2.1	0.000000069	50	7.40E-08	2.1

Table 183: Contents of the raw data file from METAS - Part 1

Label	Lab	Date	Conn	Volt	Freq	Temp	Tempu	ipvr	ipvd	ipvu	ipk	qvr	qdf	qvu	qk
0.9	metas	14/11/2000	BPO	3	55	20.5	0.3	0.89999996	16	7.10E-08	2.2	0.000000143	14	1.01E-07	2.2
0.8	metas	14/11/2000	BPO	3	55	20.5	0.3	0.799999906	12	9.90E-08	2.2	0.000000255	22	1.14E-07	2.1
0.7	metas	14/11/2000	BPO	3	55	20.5	0.3	0.699999898	18	6.40E-08	2.2	0.000000249	22	1.15E-07	2.1
0.6	metas	14/11/2000	BPO	3	55	20.5	0.3	0.599999876	18	6.80E-08	2.2	0.000000279	22	1.17E-07	2.1
0.5	metas	14/11/2000	BPO	3	55	20.5	0.3	0.499999883	15	8.00E-08	2.2	0.000000228	24	1.26E-07	2.1
0.4	metas	14/11/2000	BPO	3	55	20.5	0.3	0.399999844	16	7.70E-08	2.2	0.0000002	24	1.22E-07	2.1
0.3	metas	14/11/2000	BPO	3	55	20.5	0.3	0.299999834	17	6.90E-08	2.2	0.000000214	24	1.18E-07	2.1
0.2	metas	14/11/2000	BPO	3	55	20.5	0.3	0.199999854	18	6.20E-08	2.2	0.000000186	20	1.10E-07	2.1
0.1	metas	14/11/2000	BPO	3	55	20.5	0.3	0.099999875	15	5.30E-08	2.2	0.000000155	13	1.01E-07	2.2
0.01	metas	14/11/2000	BPO	3	55	20.5	0.3	0.009996162	11	9.80E-08	2.3	0.000003978	12	2.13E-07	2.3
10/11	metas	14/11/2000	BPO	3	55	20.5	0.3	0.909091029	10	4.90E-08	2.3	-0.000000167	11	9.80E-08	2.3
9/11	metas	14/11/2000	BPO	3	55	20.5	0.3	0.818181829	10	4.90E-08	2.3	-0.00000003	13	1.01E-07	2.2
8/11	metas	14/11/2000	BPO	3	55	20.5	0.3	0.727272708	14	5.70E-08	2.2	0.000000008	16	1.06E-07	2.2
7/11	metas	14/11/2000	BPO	3	55	20.5	0.3	0.636363527	13	6.40E-08	2.2	0.000000129	18	1.11E-07	2.2
6/11	metas	14/11/2000	BPO	3	55	20.5	0.3	0.545454384	14	6.00E-08	2.2	0.000000201	18	1.13E-07	2.2
5/11	metas	14/11/2000	BPO	3	55	20.5	0.3	0.454545313	13	6.20E-08	2.2	0.000000186	20	1.15E-07	2.1
4/11	metas	14/11/2000	BPO	3	55	20.5	0.3	0.363636086	14	6.00E-08	2.2	0.000000388	22	1.15E-07	2.1
3/11	metas	14/11/2000	BPO	3	55	20.5	0.3	0.27272701	14	5.40E-08	2.2	0.000000376	21	1.12E-07	2.1
2/11	metas	14/11/2000	BPO	3	55	20.5	0.3	0.181817862	14	5.30E-08	2.2	0.000000441	18	1.07E-07	2.2
1/11	metas	14/11/2000	BPO	3	55	20.5	0.3	0.090908821	11	4.90E-08	2.3	0.000000378	12	9.90E-08	2.3

Table 184: Contents of the raw data file from METAS - Part 2

Label	Lab	Date	Conn	Volt	Freq	Temp	Tempu	ipvr	ipvd	ipvu	ipk	qvr	qdf	qvu	qk
0.9	NIM	02/11/2001	BPA	10	1000	19	2	0.900000055	500	5.00E-09	2.5	-0.000000078	500	1.00E-08	2.5
0.8	NIM	02/11/2001	BPA	10	1000	19	2	0.800000063	500	1.00E-08	2.5	-0.000000122	500	2.00E-08	2.5
0.7	NIM	02/11/2001	BPA	10	1000	19	2	0.70000006	500	1.00E-08	2.5	-0.000000156	500	2.50E-08	2.5
0.6	NIM	02/11/2001	BPA	10	1000	19	2	0.600000043	500	1.00E-08	2.5	-0.000000154	500	2.50E-08	2.5
0.5	NIM	02/11/2001	BPA	10	1000	19	2	0.50000001	500	5.00E-09	2.5	-0.000000158	500	2.00E-08	2.5
0.4	NIM	02/11/2001	BPA	10	1000	19	2	0.399999993	500	1.00E-08	2.5	-0.000000123	500	1.50E-08	2.5
0.3	NIM	02/11/2001	BPA	10	1000	19	2	0.299999973	500	1.00E-08	2.5	-0.00000008	500	1.00E-08	2.5
0.2	NIM	02/11/2001	BPA	10	1000	19	2	0.199999957	500	1.50E-08	2.5	-0.000000035	500	1.00E-08	2.5
0.1	NIM	02/11/2001	BPA	10	1000	19	2	0.099999957	500	5.00E-09	2.5	0.000000008	500	1.00E-08	2.5
0.01	NIM	10/11/2001	BPA	10	1000	19.8	2	0.009998847	500	1.00E-08	2.5	0.000000362	500	1.00E-08	2.5
10/11	NIM	02/11/2001	BPA	10	1000	19	2	0.909090969	500	1.00E-08	2.5	-0.000000116	500	1.50E-08	2.5
9/11	NIM	02/11/2001	BPA	10	1000	19	2	0.818181852	500	1.00E-08	2.5	-0.000000169	500	2.00E-08	2.5
8/11	NIM	02/11/2001	BPA	10	1000	19	2	0.727272748	500	1.00E-08	2.5	-0.000000192	500	1.00E-08	2.5
7/11	NIM	02/11/2001	BPA	10	1000	19	2	0.636363647	500	1.00E-08	2.5	-0.000000183	500	1.50E-08	2.5
6/11	NIM	02/11/2001	BPA	10	1000	19	2	0.545454544	500	1.00E-08	2.5	-0.000000164	500	1.50E-08	2.5
5/11	NIM	02/11/2001	BPA	10	1000	19	2	0.454545467	500	1.00E-08	2.5	-0.000000155	500	2.50E-08	2.5
4/11	NIM	02/11/2001	BPA	10	1000	19	2	0.363636349	500	1.00E-08	2.5	-0.000000054	500	2.50E-08	2.5
3/11	NIM	02/11/2001	BPA	10	1000	19	2	0.272727262	500	5.00E-09	2.5	-0.00000001	500	1.50E-08	2.5
2/11	NIM	02/11/2001	BPA	10	1000	19	2	0.181818151	500	5.00E-09	2.5	0.000000024	500	1.50E-08	2.5
1/11	NIM	02/11/2001	BPA	10	1000	19	2	0.090909051	500	5.00E-09	2.5	0.000000056	500	1.00E-08	2.5

Table 185: Contents of the raw data file from NIM - Part 1

Label	Lab	Date	Conn	Volt	Freq	Temp	Tempu	ipvr	ipvd	ipvu	ipk	qvr	qdf	qvu	qk
0.9	NIM	03/11/2001	BPA	3	55	19	2	0.899999923	500	1.50E-08	2.5	0.000000116	500	2.00E-08	2.5
0.8	NIM	03/11/2001	BPA	3	55	19	2	0.799999847	500	2.50E-08	2.5	0.000000198	500	2.00E-08	2.5
0.7	NIM	03/11/2001	BPA	3	55	19	2	0.699999859	500	3.50E-08	2.5	0.000000191	500	2.00E-08	2.5
0.6	NIM	03/11/2001	BPA	3	55	19	2	0.599999816	500	4.50E-08	2.5	0.000000196	500	1.50E-08	2.5
0.5	NIM	03/11/2001	BPA	3	55	19	2	0.499999828	500	3.50E-08	2.5	0.000000189	500	3.00E-08	2.5
0.4	NIM	03/11/2001	BPA	3	55	19	2	0.399999818	500	3.00E-08	2.5	0.000000138	500	3.00E-08	2.5
0.3	NIM	03/11/2001	BPA	3	55	19	2	0.299999786	500	2.00E-08	2.5	0.000000131	500	2.50E-08	2.5
0.2	NIM	03/11/2001	BPA	3	55	19	2	0.199999809	500	2.00E-08	2.5	0.000000113	500	1.50E-08	2.5
0.1	NIM	03/11/2001	BPA	3	55	19	2	0.099999843	500	2.00E-08	2.5	0.000000084	500	2.00E-08	2.5
0.01	NIM	10/11/2001	BPA	3	55	19.8	2	0.009995669	500	2.50E-08	2.5	0.000001456	500	2.50E-08	2.5
10/11	NIM	03/11/2001	BPA	3	55	19	2	0.909091118	500	1.00E-08	2.5	-0.000000083	500	3.50E-08	2.5
9/11	NIM	03/11/2001	BPA	3	55	19	2	0.818181886	500	3.00E-08	2.5	0.000000005	500	4.50E-08	2.5
8/11	NIM	03/11/2001	BPA	3	55	19	2	0.727272754	500	3.50E-08	2.5	0.000000049	500	6.00E-08	2.5
7/11	NIM	03/11/2001	BPA	3	55	19	2	0.636363567	500	3.00E-08	2.5	0.000000104	500	4.50E-08	2.5
6/11	NIM	03/11/2001	BPA	3	55	19	2	0.545454402	500	4.00E-08	2.5	0.000000148	500	3.50E-08	2.5
5/11	NIM	03/11/2001	BPA	3	55	19	2	0.454545359	500	3.00E-08	2.5	0.000000159	500	3.50E-08	2.5
4/11	NIM	03/11/2001	BPA	3	55	19	2	0.363636061	500	2.50E-08	2.5	0.000000225	500	3.00E-08	2.5
3/11	NIM	03/11/2001	BPA	3	55	19	2	0.272726995	500	2.50E-08	2.5	0.000000224	500	3.00E-08	2.5
2/11	NIM	03/11/2001	BPA	3	55	19	2	0.181817808	500	2.00E-08	2.5	0.000000223	500	4.00E-08	2.5
1/11	NIM	03/11/2001	BPA	3	55	19	2	0.090908776	500	2.00E-08	2.5	0.000000178	500	3.00E-08	2.5

Table 186: Contents of the raw data file from NIM - Part 2

Label	Lab	Date	Conn	Volt	Freq	Temp	Tempu	ipvr	ipvd	ipvu	ipk	qvr	qdf	qvu	qk
0.9	NIST	2003-05-21	BPO	10	1000	24	1.0	0.900000068	4	4.2E-08	2	-0.000000069	4	1.0E-07	2
0.8	NIST	2003-05-21	BPO	10	1000	24	1.0	0.800000083	4	4.1E-08	2	-0.000000104	4	1.0E-07	2
0.7	NIST	2003-05-21	BPO	10	1000	24	1.0	0.700000079	4	4.2E-08	2	-0.000000130	4	1.0E-07	2
0.6	NIST	2003-05-21	BPO	10	1000	24	1.0	0.600000054	4	4.2E-08	2	-0.000000125	4	1.2E-07	2
0.5	NIST	2003-05-21	BPO	10	1000	24	1.0	0.500000016	4	4.3E-08	2	-0.000000126	4	1.1E-07	2
0.4	NIST	2003-05-21	BPO	10	1000	24	1.0	0.399999989	4	4.4E-08	2	-0.000000085	4	1.1E-07	2
0.3	NIST	2003-05-21	BPO	10	1000	24	1.0	0.299999967	4	4.4E-08	2	-0.000000039	4	1.1E-07	2
0.2	NIST	2003-05-21	BPO	10	1000	24	1.0	0.199999959	4	4.3E-08	2	-0.000000003	4	1.0E-07	2
0.1	NIST	2003-05-21	BPO	10	1000	24	1.0	0.099999959	4	4.2E-08	2	0.000000023	4	1.0E-07	2
0.01	NIST	2003-06-23	BPO	10	1000	24	1.0	0.009998782	10	5.0E-07	2	0.000000493	10	5.0E-07	2
10/11	NIST	2003-05-18	BPO	10	1000	24	1.0	0.909090965	4	6.2E-08	2	-0.000000115	4	1.2E-07	2
9/11	NIST	2003-05-18	BPO	10	1000	24	1.0	0.818181847	4	6.4E-08	2	-0.000000159	4	1.3E-07	2
8/11	NIST	2003-05-18	BPO	10	1000	24	1.0	0.727272745	4	6.6E-08	2	-0.000000181	4	1.3E-07	2
7/11	NIST	2003-05-18	BPO	10	1000	24	1.0	0.636363638	4	6.7E-08	2	-0.000000162	4	1.3E-07	2
6/11	NIST	2003-05-18	BPO	10	1000	24	1.0	0.545454538	4	6.8E-08	2	-0.000000135	4	1.3E-07	2
5/11	NIST	2003-05-18	BPO	10	1000	24	1.0	0.454545460	4	6.8E-08	2	-0.000000106	4	1.3E-07	2
4/11	NIST	2003-05-18	BPO	10	1000	24	1.0	0.363636340	4	6.8E-08	2	-0.000000030	4	1.3E-07	2
3/11	NIST	2003-05-18	BPO	10	1000	24	1.0	0.272727254	4	6.6E-08	2	0.000000012	4	1.3E-07	2
2/11	NIST	2003-05-18	BPO	10	1000	24	1.0	0.181818141	4	6.4E-08	2	0.000000055	4	1.2E-07	2
1/11	NIST	2003-05-18	BPO	10	1000	24	1.0	0.090909046	4	6.2E-08	2	0.000000066	4	1.2E-07	2

Table 187: Contents of the raw data file from NIST

Label	Lab	Date	Conn	Volt	Freq	Temp	Tempu	ipvr	ipvd	ipvu	ipk	qvr	qdf	qvu	qk
0.9	NPLp165	2003-01-28	BPO	10	1000	20.5	0.3	0.9000000590	66	0.000000025	2.03	-0.0000000833	84	0.000000025	2.03
0.8	NPLp165	2003-01-28	BPO	10	1000	20.5	0.3	0.8000000679	66	0.000000025	2.03	-0.0000001294	84	0.000000025	2.03
0.7	NPLp165	2003-01-28	BPO	10	1000	20.5	0.3	0.7000000624	66	0.000000025	2.03	-0.0000001617	84	0.000000025	2.03
0.6	NPLp165	2003-01-28	BPO	10	1000	20.5	0.3	0.6000000374	66	0.000000025	2.03	-0.0000001620	84	0.000000025	2.03
0.5	NPLp165	2003-01-28	BPO	10	1000	20.5	0.3	0.5000000098	66	0.000000025	2.03	-0.0000001608	84	0.000000025	2.03
0.4	NPLp165	2003-01-28	BPO	10	1000	20.5	0.3	0.3999999798	66	0.000000025	2.03	-0.0000001228	84	0.000000025	2.03
0.3	NPLp165	2003-01-28	BPO	10	1000	20.5	0.3	0.2999999608	66	0.000000025	2.03	-0.0000000734	84	0.000000025	2.03
0.2	NPLp165	2003-01-28	BPO	10	1000	20.5	0.3	0.1999999551	66	0.000000025	2.03	-0.0000000309	84	0.000000025	2.03
0.1	NPLp165	2003-01-28	BPO	10	1000	20.5	0.3	0.0999999560	66	0.000000025	2.03	0.0000000038	84	0.000000025	2.03
0.01	NPLp165	2003-01-28	BPO	10	1000	20.5	0.3	0.0099988724	60	0.000000050	2.04	0.0000004117	80	0.000000050	2.04
10/11	NPLp165	2003-01-28	BPO	10	1000	20.5	0.3	0.9090909633	66	0.000000025	2.03	-0.0000001337	84	0.000000025	2.03
9/11	NPLp165	2003-01-28	BPO	10	1000	20.5	0.3	0.8181818405	66	0.000000025	2.03	-0.0000001938	84	0.000000025	2.03
8/11	NPLp165	2003-01-28	BPO	10	1000	20.5	0.3	0.7272727364	66	0.000000025	2.03	-0.0000002253	84	0.000000025	2.03
7/11	NPLp165	2003-01-28	BPO	10	1000	20.5	0.3	0.6363636271	66	0.000000025	2.03	-0.0000002108	84	0.000000025	2.03
6/11	NPLp165	2003-01-28	BPO	10	1000	20.5	0.3	0.5454545264	66	0.000000025	2.03	-0.0000001836	84	0.000000025	2.03
5/11	NPLp165	2003-01-28	BPO	10	1000	20.5	0.3	0.4545454493	66	0.000000025	2.03	-0.0000001511	84	0.000000025	2.03
4/11	NPLp165	2003-01-28	BPO	10	1000	20.5	0.3	0.3636363289	66	0.000000025	2.03	-0.0000000684	84	0.000000025	2.03
3/11	NPLp165	2003-01-28	BPO	10	1000	20.5	0.3	0.2727272438	66	0.000000025	2.03	-0.0000000184	84	0.000000025	2.03
2/11	NPLp165	2003-01-28	BPO	10	1000	20.5	0.3	0.1818181324	66	0.000000025	2.03	0.0000000345	84	0.000000025	2.03
1/11	NPLp165	2003-01-28	BPO	10	1000	20.5	0.3	0.0909090399	66	0.000000025	2.03	0.0000000540	84	0.000000025	2.03

Table 188: Contents of the raw data file from NPL - Part 1

Label	Lab	Date	Conn	Volt	Freq	Temp	Tempu	ipvr	ipvd	ipvu	ipk	qvr	qdf	qvu	qk
0.9	NPLp167	2003-01-29	BPO	3	55	20.5	0.3	0.8999999539	45	0.000000069	2.06	0.0000001254	45	0.000000070	2.05
0.8	NPLp167	2003-01-29	BPO	3	55	20.5	0.3	0.7999998967	45	0.000000069	2.06	0.0000002254	45	0.000000070	2.05
0.7	NPLp167	2003-01-29	BPO	3	55	20.5	0.3	0.6999998986	45	0.000000069	2.06	0.0000002233	45	0.000000070	2.05
0.6	NPLp167	2003-01-29	BPO	3	55	20.5	0.3	0.5999998695	45	0.000000069	2.06	0.0000002468	45	0.000000070	2.05
0.5	NPLp167	2003-01-29	BPO	3	55	20.5	0.3	0.4999998870	45	0.000000069	2.06	0.0000002088	45	0.000000070	2.05
0.4	NPLp167	2003-01-29	BPO	3	55	20.5	0.3	0.3999998472	45	0.000000069	2.06	0.0000001754	45	0.000000070	2.05
0.3	NPLp167	2003-01-29	BPO	3	55	20.5	0.3	0.2999998334	45	0.000000069	2.06	0.0000001843	45	0.000000070	2.05
0.2	NPLp167	2003-01-29	BPO	3	55	20.5	0.3	0.1999998523	45	0.000000069	2.06	0.0000001606	45	0.000000070	2.05
0.1	NPLp167	2003-01-29	BPO	3	55	20.5	0.3	0.0999998721	45	0.000000069	2.06	0.0000001345	45	0.000000070	2.05
0.01	NPLp167	2003-01-29	BPO	3	55	20.5	0.3	0.0099963000	40	0.000000148	2.09	0.0000036800	40	0.000000150	2.09
10/11	NPLp168	2003-01-29	BPO	3	55	20.5	0.3	0.9090910417	45	0.000000069	2.06	-0.0000001524	45	0.000000070	2.05
9/11	NPLp168	2003-01-29	BPO	3	55	20.5	0.3	0.8181818397	45	0.000000069	2.06	-0.0000000351	45	0.000000070	2.05
8/11	NPLp168	2003-01-29	BPO	3	55	20.5	0.3	0.7272727191	45	0.000000069	2.06	-0.0000000101	45	0.000000070	2.05
7/11	NPLp168	2003-01-29	BPO	3	55	20.5	0.3	0.6363635405	45	0.000000069	2.06	0.0000000974	45	0.000000070	2.05
6/11	NPLp168	2003-01-29	BPO	3	55	20.5	0.3	0.5454543975	45	0.000000069	2.06	0.0000001636	45	0.000000070	2.05
5/11	NPLp168	2003-01-29	BPO	3	55	20.5	0.3	0.4545453265	45	0.000000069	2.06	0.0000001547	45	0.000000070	2.05
4/11	NPLp168	2003-01-29	BPO	3	55	20.5	0.3	0.3636360972	45	0.000000069	2.06	0.0000003369	45	0.000000070	2.05
3/11	NPLp168	2003-01-29	BPO	3	55	20.5	0.3	0.2727270202	45	0.000000069	2.06	0.0000003309	45	0.000000070	2.05
2/11	NPLp168	2003-01-29	BPO	3	55	20.5	0.3	0.1818178793	45	0.000000069	2.06	0.0000003912	45	0.000000070	2.05
1/11	NPLp168	2003-01-29	BPO	3	55	20.5	0.3	0.0909088300	45	0.000000069	2.06	0.0000003323	45	0.000000070	2.05

Table 189: Contents of the raw data file from NPL - Part 2

Label	Lab	Date	Conn	Volt	Freq	Temp	Tempu	ipvr	ipvd	ipvu	ipk	qvr	qdf	qvu	qk
0.9	NPLI	2001-03-28	BPO	10	1000	23.3	0.1	0.900000046	163	5.00E-09	2.0	-0.00000317	123	3.00E-07	2.0
0.8	NPLI	2001-03-28	BPO	10	1000	23.3	0.1	0.800000078	163	5.00E-09	2.0	-0.00000632	123	3.00E-07	2.0
0.7	NPLI	2001-03-28	BPO	10	1000	23.3	0.1	0.700000087	163	5.00E-09	2.0	-0.00000789	123	3.00E-07	2.0
0.6	NPLI	2001-03-28	BPO	10	1000	23.3	0.1	0.600000069	163	5.00E-09	2.0	-0.00000886	123	3.00E-07	2.0
0.5	NPLI	2001-03-28	BPO	10	1000	23.3	0.1	0.500000043	163	5.00E-09	2.0	-0.00000921	123	3.00E-07	2.0
0.4	NPLI	2001-03-28	BPO	10	1000	23.3	0.1	0.400000009	163	5.00E-09	2.0	-0.00000843	123	3.00E-07	2.0
0.3	NPLI	2001-03-28	BPO	10	1000	23.3	0.1	0.299999982	163	5.00E-09	2.0	-0.00000704	123	3.00E-07	2.0
0.2	NPLI	2001-03-28	BPO	10	1000	23.3	0.1	0.199999972	163	5.00E-09	2.0	-0.00000533	123	3.00E-07	2.0
0.1	NPLI	2001-03-28	BPO	10	1000	23.3	0.1	0.099999966	163	5.00E-09	2.0	-0.00000259	123	3.00E-07	2.0
0.01	NPLI	2001-03-28	BPO	10	1000	23.3	0.1	0.009998785	163	5.00E-09	2.0	0.00000391	123	3.00E-07	2.0
10/11	NPLI	2001-03-28	BPO	10	1000	23.3	0.1	0.909090935	181	9.00E-09	2.0	-0.00000362	116	5.00E-07	2.0
9/11	NPLI	2001-03-28	BPO	10	1000	23.3	0.1	0.818181825	181	9.00E-09	2.0	-0.00000649	116	5.00E-07	2.0
8/11	NPLI	2001-03-28	BPO	10	1000	23.3	0.1	0.727272732	181	9.00E-09	2.0	-0.00000845	116	5.00E-07	2.0
7/11	NPLI	2001-03-28	BPO	10	1000	23.3	0.1	0.636363632	181	9.00E-09	2.0	-0.00000974	116	5.00E-07	2.0
6/11	NPLI	2001-03-28	BPO	10	1000	23.3	0.1	0.545454539	181	9.00E-09	2.0	-0.00001032	116	5.00E-07	2.0
5/11	NPLI	2001-03-28	BPO	10	1000	23.3	0.1	0.454545464	181	9.00E-09	2.0	-0.00000961	116	5.00E-07	2.0
4/11	NPLI	2001-03-28	BPO	10	1000	23.3	0.1	0.36363634	181	9.00E-09	2.0	-0.00000837	116	5.00E-07	2.0
3/11	NPLI	2001-03-28	BPO	10	1000	23.3	0.1	0.272727255	181	9.00E-09	2.0	-0.00000692	116	5.00E-07	2.0
2/11	NPLI	2001-03-28	BPO	10	1000	23.3	0.1	0.181818142	181	9.00E-09	2.0	-0.00000447	116	5.00E-07	2.0
1/11	NPLI	2001-03-28	BPO	10	1000	23.3	0.1	0.090909047	181	9.00E-09	2.0	-0.0000022	116	5.00E-07	2.0

Table 190: Contents of the raw data file from NPLI - Part 1

Label	Lab	Date	Conn	Volt	Freq	Temp	Tempu	ipvr	ipvd	ipvu	ipk	qvr	qdf	qvu	qk
0.9	NPLI	2001-03-28	BPO	3	55	23.3	0.1	0.899999929	211	3.00E-08	2.0	-0.00000768	109	3.00E-07	2.0
0.8	NPLI	2001-03-28	BPO	3	55	23.3	0.1	0.799999921	211	3.00E-08	2.0	-0.00001359	109	3.00E-07	2.0
0.7	NPLI	2001-03-28	BPO	3	55	23.3	0.1	0.699999929	211	3.00E-08	2.0	-0.00001763	109	3.00E-07	2.0
0.6	NPLI	2001-03-28	BPO	3	55	23.3	0.1	0.599999915	211	3.00E-08	2.0	-0.00001947	109	3.00E-07	2.0
0.5	NPLI	2001-03-28	BPO	3	55	23.3	0.1	0.499999916	211	3.00E-08	2.0	-0.0000196	109	3.00E-07	2.0
0.4	NPLI	2001-03-28	BPO	3	55	23.3	0.1	0.399999875	211	3.00E-08	2.0	-0.00001755	109	3.00E-07	2.0
0.3	NPLI	2001-03-28	BPO	3	55	23.3	0.1	0.29999987	211	3.00E-08	2.0	-0.00001446	109	3.00E-07	2.0
0.2	NPLI	2001-03-28	BPO	3	55	23.3	0.1	0.199999881	211	3.00E-08	2.0	-0.00001049	109	3.00E-07	2.0
0.1	NPLI	2001-03-28	BPO	3	55	23.3	0.1	0.099999903	211	3.00E-08	2.0	-0.00000541	109	3.00E-07	2.0
0.01	NPLI	2001-03-28	BPO	3	55	23.3	0.1	0.009997763	211	3.00E-08	2.0	0.00000339	109	3.00E-07	2.0
10/11	NPLI	2001-03-28	BPO	3	55	23.3	0.1	0.909090875	188	5.00E-08	2.0	0.00000011	160	5.00E-07	2.0
9/11	NPLI	2001-03-28	BPO	3	55	23.3	0.1	0.818181682	188	5.00E-08	2.0	0.00000047	160	5.00E-07	2.0
8/11	NPLI	2001-03-28	BPO	3	55	23.3	0.1	0.727272566	188	5.00E-08	2.0	0.00000051	160	5.00E-07	2.0
7/11	NPLI	2001-03-28	BPO	3	55	23.3	0.1	0.636363436	188	5.00E-08	2.0	0.00000085	160	5.00E-07	2.0
6/11	NPLI	2001-03-28	BPO	3	55	23.3	0.1	0.545454335	188	5.00E-08	2.0	0.00000096	160	5.00E-07	2.0
5/11	NPLI	2001-03-28	BPO	3	55	23.3	0.1	0.454545283	188	5.00E-08	2.0	0.00000083	160	5.00E-07	2.0
4/11	NPLI	2001-03-28	BPO	3	55	23.3	0.1	0.363636172	188	5.00E-08	2.0	0.00000145	160	5.00E-07	2.0
3/11	NPLI	2001-03-28	BPO	3	55	23.3	0.1	0.2727271	188	5.00E-08	2.0	0.00000141	160	5.00E-07	2.0
2/11	NPLI	2001-03-28	BPO	3	55	23.3	0.1	0.181818016	188	5.00E-08	2.0	0.00000162	160	5.00E-07	2.0
1/11	NPLI	2001-03-28	BPO	3	55	23.3	0.1	0.090908965	188	5.00E-08	2.0	0.00000135	160	5.00E-07	2.0

Table 191: Contents of the raw data file from NPLI - Part 2

Label	Lab	Date	Conn	Volt	Freq	Temp	Tempu	ipvr	ipvd	ipvu	ipk	qvr	qdf	qvu	qk
0.9	NRC	2003-02-26	BPO	10	1000.00	20.5	0.6	0.900000049	15.7	0.000000030	2.1	-0.000000095	16.3	0.000000030	2.1
0.8	NRC	2003-02-26	BPO	10	1000.00	20.5	0.6	0.800000051	15.7	0.000000030	2.1	-0.000000151	16.3	0.000000030	2.1
0.7	NRC	2003-02-26	BPO	10	1000.00	20.5	0.6	0.700000042	15.7	0.000000030	2.1	-0.00000188	16.3	0.000000030	2.1
0.6	NRC	2003-02-26	BPO	10	1000.00	20.5	0.6	0.600000015	15.7	0.000000030	2.1	-0.00000189	16.3	0.000000030	2.1
0.5	NRC	2003-02-26	BPO	10	1000.00	20.5	0.6	0.499999987	15.7	0.000000030	2.1	-0.00000186	16.3	0.000000030	2.1
0.4	NRC	2003-02-26	BPO	10	1000.00	20.5	0.6	0.399999956	15.7	0.000000030	2.1	-0.000000145	16.3	0.000000030	2.1
0.3	NRC	2003-02-26	BPO	10	1000.00	20.5	0.6	0.299999940	15.7	0.000000030	2.1	-0.000000091	16.3	0.000000030	2.1
0.2	NRC	2003-02-26	BPO	10	1000.00	20.5	0.6	0.199999939	15.7	0.000000030	2.1	-0.000000042	16.3	0.000000030	2.1
0.1	NRC	2003-02-26	BPO	10	1000.00	20.5	0.6	0.099999947	15.7	0.000000030	2.1	-0.000000001	16.3	0.000000030	2.1
0.01	NRC	2003-02-26	BPO	10	1000.00	20.5	0.6	0.010001168	30.6	0.000000060	2.0	-0.000000439	28.3	0.000000060	2.0
10/11	NRC	2003-02-26	BPO	10	1000.00	20.5	0.6	0.909090953	14.84322302	0.000000040	2.1	-0.000000157	14.3	0.000000040	2.1
9/11	NRC	2003-02-26	BPO	10	1000.00	20.5	0.6	0.818181820	14.84322302	0.000000040	2.1	-0.000000233	14.3	0.000000040	2.1
8/11	NRC	2003-02-26	BPO	10	1000.00	20.5	0.6	0.727272710	14.84322302	0.000000040	2.1	-0.000000275	14.3	0.000000040	2.1
7/11	NRC	2003-02-26	BPO	10	1000.00	20.5	0.6	0.636363597	14.84322302	0.000000040	2.1	-0.000000265	14.3	0.000000040	2.1
6/11	NRC	2003-02-26	BPO	10	1000.00	20.5	0.6	0.545454495	14.84322302	0.000000040	2.1	-0.000000238	14.3	0.000000040	2.1
5/11	NRC	2003-02-26	BPO	10	1000.00	20.5	0.6	0.454545420	14.84322302	0.000000040	2.1	-0.000000202	14.3	0.000000040	2.1
4/11	NRC	2003-02-26	BPO	10	1000.00	20.5	0.6	0.363636304	14.84322302	0.000000040	2.1	-0.000000112	14.3	0.000000040	2.1
3/11	NRC	2003-02-26	BPO	10	1000.00	20.5	0.6	0.272727223	14.84322302	0.000000040	2.1	-0.000000053	14.3	0.000000040	2.1
2/11	NRC	2003-02-26	BPO	10	1000.00	20.5	0.6	0.181818119	14.84322302	0.000000040	2.1	0.000000012	14.3	0.000000040	2.1
1/11	NRC	2003-02-26	BPO	10	1000.00	20.5	0.6	0.090909032	14.84322302	0.000000040	2.1	0.000000044	14.3	0.000000040	2.1

Table 192: Contents of the raw data file from NRC

Label	Lab	Date	Conn	Volt	Freq	Temp	Tempu	ipvr	ipvd	ipvu	ipk	qvr	qdf	qvu	qk
0.9	PTB	2000-01-12	BPO	10	995	23	1	0.900000051	50	2.0E-08	2	-0.000000083	50	2.0E-08	2
0.8	PTB	2000-01-12	BPO	10	995	23	1	0.800000055	50	2.0E-08	2	-0.000000129	50	2.0E-08	2
0.7	PTB	2000-01-12	BPO	10	995	23	1	0.700000047	50	2.0E-08	2	-0.000000163	50	2.0E-08	2
0.6	PTB	2000-01-12	BPO	10	995	23	1	0.600000020	50	2.0E-08	2	-0.000000163	50	2.0E-08	2
0.5	PTB	2000-01-12	BPO	10	995	23	1	0.499999992	50	2.0E-08	2	-0.000000161	50	2.0E-08	2
0.4	PTB	2000-01-12	BPO	10	995	23	1	0.399999964	50	2.0E-08	2	-0.000000122	50	2.0E-08	2
0.3	PTB	2000-01-12	BPO	10	995	23	1	0.299999948	50	2.0E-08	2	-0.000000073	50	2.0E-08	2
0.2	PTB	2000-01-12	BPO	10	995	23	1	0.199999946	50	2.0E-08	2	-0.000000029	50	2.0E-08	2
0.1	PTB	2000-01-12	BPO	10	995	23	1	0.099999950	50	2.0E-08	2	0.000000005	50	2.0E-08	2
0.01	PTB	2000-01-20	BPO	10	995	23	1	0.009998838	50	5.0E-08	2	0.000000373	50	1.0E-07	2
10/11	PTB	2000-01-11	BPO	10	995	23	1	0.909090960	50	2.0E-08	2	-0.000000137	50	2.0E-08	2
9/11	PTB	2000-01-11	BPO	10	995	23	1	0.818181835	50	2.0E-08	2	-0.000000199	50	2.0E-08	2
8/11	PTB	2000-01-11	BPO	10	995	23	1	0.727272730	50	2.0E-08	2	-0.000000232	50	2.0E-08	2
7/11	PTB	2000-01-11	BPO	10	995	23	1	0.636363619	50	2.0E-08	2	-0.000000218	50	2.0E-08	2
6/11	PTB	2000-01-11	BPO	10	995	23	1	0.545454520	50	2.0E-08	2	-0.000000191	50	2.0E-08	2
5/11	PTB	2000-01-11	BPO	10	995	23	1	0.454545443	50	2.0E-08	2	-0.000000156	50	2.0E-08	2
4/11	PTB	2000-01-11	BPO	10	995	23	1	0.363636321	50	2.0E-08	2	-0.000000073	50	2.0E-08	2
3/11	PTB	2000-01-11	BPO	10	995	23	1	0.272727235	50	2.0E-08	2	-0.000000022	50	2.0E-08	2
2/11	PTB	2000-01-11	BPO	10	995	23	1	0.181818123	50	2.0E-08	2	0.000000032	50	2.0E-08	2
1/11	PTB	2000-01-11	BPO	10	995	23	1	0.090909032	50	2.0E-08	2	0.000000053	50	2.0E-08	2

Table 193: Contents of the raw data file from PTB - Part 1

Label	Lab	Date	Conn	Volt	Freq	Temp	Tempu	ipvr	ipvd	ipvu	ipk	qvr	qdf	qvu	qk
0.9	PTB	2000-01-26	BPO	3	55	23	1	0.899999955	50	2.0E-08	2	0.000000126	50	2.0E-08	2
0.8	PTB	2000-01-26	BPO	3	55	23	1	0.799999896	50	2.0E-08	2	0.000000226	50	2.0E-08	2
0.7	PTB	2000-01-26	BPO	3	55	23	1	0.699999897	50	2.0E-08	2	0.000000225	50	2.0E-08	2
0.6	PTB	2000-01-26	BPO	3	55	23	1	0.599999866	50	2.0E-08	2	0.000000248	50	2.0E-08	2
0.5	PTB	2000-01-26	BPO	3	55	23	1	0.499999880	50	2.0E-08	2	0.000000210	50	2.0E-08	2
0.4	PTB	2000-01-26	BPO	3	55	23	1	0.399999837	50	2.0E-08	2	0.000000179	50	2.0E-08	2
0.3	PTB	2000-01-26	BPO	3	55	23	1	0.299999823	50	2.0E-08	2	0.000000190	50	2.0E-08	2
0.2	PTB	2000-01-26	BPO	3	55	23	1	0.199999843	50	2.0E-08	2	0.000000165	50	2.0E-08	2
0.1	PTB	2000-01-26	BPO	3	55	23	1	0.099999867	50	2.0E-08	2	0.000000139	50	2.0E-08	2
0.01	PTB	2000-01-28	BPO	3	55	23	1	0.009996126	50	1.0E-07	2	0.000004166	50	2.0E-07	2
10/11	PTB	2000-01-26	BPO	3	55	23	1	0.909091042	50	2.0E-08	2	-0.000000155	50	2.0E-08	2
9/11	PTB	2000-01-26	BPO	3	55	23	1	0.818181837	50	2.0E-08	2	-0.000000034	50	2.0E-08	2
8/11	PTB	2000-01-26	BPO	3	55	23	1	0.727272712	50	2.0E-08	2	-0.000000004	50	2.0E-08	2
7/11	PTB	2000-01-26	BPO	3	55	23	1	0.636363533	50	2.0E-08	2	0.000000105	50	2.0E-08	2
6/11	PTB	2000-01-26	BPO	3	55	23	1	0.545454393	50	2.0E-08	2	0.000000175	50	2.0E-08	2
5/11	PTB	2000-01-26	BPO	3	55	23	1	0.454545328	50	2.0E-08	2	0.000000164	50	2.0E-08	2
4/11	PTB	2000-01-26	BPO	3	55	23	1	0.363636096	50	2.0E-08	2	0.000000349	50	2.0E-08	2
3/11	PTB	2000-01-26	BPO	3	55	23	1	0.272727019	50	2.0E-08	2	0.000000344	50	2.0E-08	2
2/11	PTB	2000-01-26	BPO	3	55	23	1	0.181817875	50	2.0E-08	2	0.000000404	50	2.0E-08	2
1/11	PTB	2000-01-26	BPO	3	55	23	1	0.090908824	50	2.0E-08	2	0.000000343	50	2.0E-08	2

Table 194: Contents of the raw data file from PTB - Part 2

Label	Lab	Date	Conn	Volt	Freq	Temp	Tempu	ipvr	ipvd	ipvu	ipk	qvr	qdf	qvu	qk
0.9	SP	27/06/2001	BPA	10	1000.36	23.1	0.5	0.900000054	50	4.80E-08	2	-0.000000067	50	7.10E-08	2
0.8	SP	27/06/2001	BPA	10	1000.36	23.1	0.5	0.800000065	50	4.80E-08	2	-0.000000115	50	7.10E-08	2
0.7	SP	27/06/2001	BPA	10	1000.36	23.1	0.5	0.700000047	50	4.80E-08	2	-0.000000145	50	7.10E-08	2
0.6	SP	27/06/2001	BPA	10	1000.36	23.1	0.5	0.600000024	50	4.80E-08	2	-0.000000133	50	7.10E-08	2
0.5	SP	27/06/2001	BPA	10	1000.36	23.1	0.5	0.500000011	50	4.80E-08	2	-0.00000012	50	7.10E-08	2
0.4	SP	27/06/2001	BPA	10	1000.36	23.1	0.5	0.399999987	50	4.80E-08	2	-0.000000086	50	7.10E-08	2
0.3	SP	27/06/2001	BPA	10	1000.36	23.1	0.5	0.299999963	50	4.80E-08	2	-0.000000034	50	7.10E-08	2
0.2	SP	27/06/2001	BPA	10	1000.36	23.1	0.5	0.199999955	50	4.80E-08	2	-0.000000009	50	7.10E-08	2
0.1	SP	27/06/2001	BPA	10	1000.36	23.1	0.5	0.099999953	50	4.80E-08	2	0.000000018	50	7.10E-08	2
0.01	SP	27/06/2001	BPA	10	1000.36	23.1	0.5	0.009998821	50	4.80E-08	2	0.000000384	50	7.10E-08	2
10/11	SP	27/06/2001	BPA	10	1000.36	23.1	0.5	0.909090958	50	4.80E-08	2	-0.000000125	50	7.10E-08	2
9/11	SP	27/06/2001	BPA	10	1000.36	23.1	0.5	0.818181839	50	4.80E-08	2	-0.000000187	50	7.10E-08	2
8/11	SP	27/06/2001	BPA	10	1000.36	23.1	0.5	0.727272724	50	4.80E-08	2	-0.000000201	50	7.10E-08	2
7/11	SP	27/06/2001	BPA	10	1000.36	23.1	0.5	0.636363623	50	4.80E-08	2	-0.000000186	50	7.10E-08	2
6/11	SP	27/06/2001	BPA	10	1000.36	23.1	0.5	0.545454515	50	4.80E-08	2	-0.00000015	50	7.10E-08	2
5/11	SP	27/06/2001	BPA	10	1000.36	23.1	0.5	0.454545443	50	4.80E-08	2	-0.000000135	50	7.10E-08	2
4/11	SP	27/06/2001	BPA	10	1000.36	23.1	0.5	0.36363632	50	4.80E-08	2	-0.000000054	50	7.10E-08	2
3/11	SP	27/06/2001	BPA	10	1000.36	23.1	0.5	0.272727238	50	4.80E-08	2	-0.000000026	50	7.10E-08	2
2/11	SP	27/06/2001	BPA	10	1000.36	23.1	0.5	0.181818131	50	4.80E-08	2	0.000000022	50	7.10E-08	2
1/11	SP	27/06/2001	BPA	10	1000.36	23.1	0.5	0.090909031	50	4.80E-08	2	0.000000037	50	7.10E-08	2

Table 195: Contents of the raw data file from SP

Label	Lab	Date	Conn	Volt	Freq	Temp	Tempu	ipvr	ipvd	ipvu	ipk	qvr	qdf	qvu	qk
0.9	UME	2002-12-19	BPO	10	1000.00	22.5	0.3	0.900000045	39	5.0E-08	2.07	-0.000000086	34	6.2E-08	2.09
0.8	UME	2002-12-19	BPO	10	1000.00	22.5	0.3	0.800000050	39	5.0E-08	2.07	-0.000000130	34	6.2E-08	2.09
0.7	UME	2002-12-19	BPO	10	1000.00	22.5	0.3	0.700000045	39	5.0E-08	2.07	-0.000000160	34	6.2E-08	2.09
0.6	UME	2002-12-19	BPO	10	1000.00	22.5	0.3	0.600000025	39	5.0E-08	2.07	-0.000000154	34	6.2E-08	2.09
0.5	UME	2002-12-19	BPO	10	1000.00	22.5	0.3	0.499999999	39	5.0E-08	2.07	-0.000000152	34	6.2E-08	2.09
0.4	UME	2002-12-19	BPO	10	1000.00	22.5	0.3	0.399999974	39	5.0E-08	2.07	-0.000000109	34	6.2E-08	2.09
0.3	UME	2002-12-19	BPO	10	1000.00	22.5	0.3	0.299999957	39	5.0E-08	2.07	-0.000000062	34	6.2E-08	2.09
0.2	UME	2002-12-19	BPO	10	1000.00	22.5	0.3	0.199999956	39	5.0E-08	2.07	-0.000000016	34	6.2E-08	2.09
0.1	UME	2002-12-19	BPO	10	1000.00	22.5	0.3	0.099999957	39	5.0E-08	2.07	0.000000013	34	6.2E-08	2.09
0.01	UME	2002-12-19	BPO	10	1000.00	22.5	0.3	0.009998853	51	9.0E-08	2.05	-0.000000672	51	9.0E-08	2.05
10/11	UME	2002-12-19	BPO	10	1000.00	22.5	0.3	0.909090952	39	5.0E-08	2.07	-0.000000145	34	6.2E-08	2.09
9/11	UME	2002-12-19	BPO	10	1000.00	22.5	0.3	0.818181825	39	5.0E-08	2.07	-0.000000205	34	6.2E-08	2.09
8/11	UME	2002-12-19	BPO	10	1000.00	22.5	0.3	0.727272719	39	5.0E-08	2.07	-0.000000235	34	6.2E-08	2.09
7/11	UME	2002-12-19	BPO	10	1000.00	22.5	0.3	0.636363610	39	5.0E-08	2.07	-0.000000216	34	6.2E-08	2.09
6/11	UME	2002-12-19	BPO	10	1000.00	22.5	0.3	0.545454509	39	5.0E-08	2.07	-0.000000184	34	6.2E-08	2.09
5/11	UME	2002-12-19	BPO	10	1000.00	22.5	0.3	0.454545434	39	5.0E-08	2.07	-0.000000147	34	6.2E-08	2.09
4/11	UME	2002-12-19	BPO	10	1000.00	22.5	0.3	0.363636315	39	5.0E-08	2.07	-0.000000060	34	6.2E-08	2.09
3/11	UME	2002-12-19	BPO	10	1000.00	22.5	0.3	0.272727233	39	5.0E-08	2.07	-0.000000007	34	6.2E-08	2.09
2/11	UME	2002-12-19	BPO	10	1000.00	22.5	0.3	0.181818124	39	5.0E-08	2.07	0.000000048	34	6.2E-08	2.09
1/11	UME	2002-12-19	BPO	10	1000.00	22.5	0.3	0.090909036	39	5.0E-08	2.07	0.000000066	34	6.2E-08	2.09

Table 196: Contents of the raw data file from UME

Label	Lab	Date	Conn	Volt	Freq	Temp	Tempu	ipvr	ipvd	ipvu	ipk	qvr	qdf	qvu	qk
0.9	VNIIM	2002.09.23	BPO	10	1000.00	21.0	0.5	0.900000061	30	1.80E-08	2.0	-0.000000066	30	2.80E-08	2.0
0.8	VNIIM	2002.09.23	BPO	10	1000.00	21.0	0.5	0.800000071	30	1.80E-08	2.0	-0.000000099	30	2.80E-08	2.0
0.7	VNIIM	2002.09.23	BPO	10	1000.00	21.0	0.5	0.700000065	30	1.80E-08	2.0	-0.000000122	30	2.80E-08	2.0
0.6	VNIIM	2002.09.23	BPO	10	1000.00	21.0	0.5	0.600000039	30	1.80E-08	2.0	-0.000000114	30	2.80E-08	2.0
0.5	VNIIM	2002.09.23	BPO	10	1000.00	21.0	0.5	0.500000008	30	1.80E-08	2.0	-0.000000110	30	2.80E-08	2.0
0.4	VNIIM	2002.09.23	BPO	10	1000.00	21.0	0.5	0.399999976	30	1.80E-08	2.0	-0.000000074	30	2.80E-08	2.0
0.3	VNIIM	2002.09.23	BPO	10	1000.00	21.0	0.5	0.299999954	30	1.80E-08	2.0	-0.000000033	30	2.80E-08	2.0
0.2	VNIIM	2002.09.23	BPO	10	1000.00	21.0	0.5	0.199999949	30	1.80E-08	2.0	0.000000006	30	2.80E-08	2.0
0.1	VNIIM	2002.09.23	BPO	10	1000.00	21.0	0.5	0.099999952	30	1.80E-08	2.0	0.000000020	30	2.80E-08	2.0
0.01	VNIIM	2002.09.23	BPO	10	1000.00	21.0	0.5	0.009998835	30	2.20E-08	2.0	0.000000386	30	3.30E-08	2.0
10/11	VNIIM	2002.09.23	BPO	10	1000.00	21.0	0.5	0.909090962	30	1.80E-08	2.0	-0.000000115	30	2.80E-08	2.0
9/11	VNIIM	2002.09.23	BPO	10	1000.00	21.0	0.5	0.818181838	30	1.80E-08	2.0	-0.000000162	30	2.80E-08	2.0
8/11	VNIIM	2002.09.23	BPO	10	1000.00	21.0	0.5	0.727272734	30	1.80E-08	2.0	-0.000000186	30	2.80E-08	2.0
7/11	VNIIM	2002.09.23	BPO	10	1000.00	21.0	0.5	0.636363621	30	1.80E-08	2.0	-0.000000167	30	2.80E-08	2.0
6/11	VNIIM	2002.09.23	BPO	10	1000.00	21.0	0.5	0.54545452	30	1.80E-08	2.0	-0.000000139	30	2.80E-08	2.0
5/11	VNIIM	2002.09.23	BPO	10	1000.00	21.0	0.5	0.454545441	30	1.80E-08	2.0	-0.000000106	30	2.80E-08	2.0
4/11	VNIIM	2002.09.23	BPO	10	1000.00	21.0	0.5	0.363636319	30	1.80E-08	2.0	-0.000000031	30	2.80E-08	2.0
3/11	VNIIM	2002.09.23	BPO	10	1000.00	21.0	0.5	0.272727235	30	1.80E-08	2.0	0.000000012	30	2.80E-08	2.0
2/11	VNIIM	2002.09.23	BPO	10	1000.00	21.0	0.5	0.181818124	30	1.80E-08	2.0	0.000000053	30	2.80E-08	2.0
1/11	VNIIM	2002.09.23	BPO	10	1000.00	21.0	0.5	0.090909036	30	1.80E-08	2.0	0.000000062	30	2.80E-08	2.0

Table 197: Contents of the raw data file from VNIIM

Label	Lab	Date	Conn	Volt	Freq	Temp	Tempu	ipvr	ipvd	ipvu	ipk	qvr	qdf	qvu	qk
0.9	VSL	1999-11-12	BPA	10	1000.00	22.3	1.0	0.900000046	100	1.7E-08	2.0	-0.0000002	100	1.1E-07	2.0
0.8	VSL	1999-11-12	BPA	10	1000.00	22.3	1.0	0.800000055	100	2.4E-08	2.0	-0.00000035	100	1.5E-07	2.0
0.7	VSL	1999-11-12	BPA	10	1000.00	22.3	1.0	0.700000052	100	3.0E-08	2.0	-0.00000047	100	1.8E-07	2.0
0.6	VSL	1999-11-12	BPA	10	1000.00	22.3	1.0	0.600000029	100	3.5E-08	2.0	-0.00000052	100	2.1E-07	2.0
0.5	VSL	1999-11-12	BPA	10	1000.00	22.3	1.0	0.500000002	100	4.1E-08	2.0	-0.00000052	100	2.3E-07	2.0
0.4	VSL	1999-11-12	BPA	10	1000.00	22.3	1.0	0.399999975	100	3.5E-08	2.0	-0.00000044	100	2.1E-07	2.0
0.3	VSL	1999-11-12	BPA	10	1000.00	22.3	1.0	0.299999959	100	3.0E-08	2.0	-0.00000031	100	1.8E-07	2.0
0.2	VSL	1999-11-12	BPA	10	1000.00	22.3	1.0	0.199999956	100	2.4E-08	2.0	-0.00000018	100	1.5E-07	2.0
0.1	VSL	1999-11-12	BPA	10	1000.00	22.3	1.0	0.099999958	100	1.7E-08	2.0	-0.00000007	100	1.1E-07	2.0
0.01	VSL	1999-11-09	BPA	10	1000.00	22.3	1.0	0.009998753	100	4.2E-08	2.0	0.00000042	100	2.6E-07	2.0
10/11	VSL	1999-11-12	BPA	10	1000.00	22.3	1.0	0.909090964	100	1.7E-08	2.0	-0.00000021	100	1.2E-07	2.0
9/11	VSL	1999-11-12	BPA	10	1000.00	22.3	1.0	0.818181830	100	2.4E-08	2.0	-0.00000038	100	1.6E-07	2.0
8/11	VSL	1999-11-12	BPA	10	1000.00	22.3	1.0	0.727272726	100	3.0E-08	2.0	-0.00000054	100	1.9E-07	2.0
7/11	VSL	1999-11-12	BPA	10	1000.00	22.3	1.0	0.636363610	100	3.5E-08	2.0	-0.00000064	100	2.1E-07	2.0
6/11	VSL	1999-11-12	BPA	10	1000.00	22.3	1.0	0.545454511	100	4.0E-08	2.0	-0.00000067	100	2.3E-07	2.0
5/11	VSL	1999-11-12	BPA	10	1000.00	22.3	1.0	0.454545443	100	4.0E-08	2.0	-0.00000063	100	2.3E-07	2.0
4/11	VSL	1999-11-12	BPA	10	1000.00	22.3	1.0	0.363636318	100	3.5E-08	2.0	-0.00000051	100	2.1E-07	2.0
3/11	VSL	1999-11-12	BPA	10	1000.00	22.3	1.0	0.272727236	100	3.0E-08	2.0	-0.00000036	100	1.9E-07	2.0
2/11	VSL	1999-11-12	BPA	10	1000.00	22.3	1.0	0.181818117	100	2.4E-08	2.0	-0.00000019	100	1.6E-07	2.0
1/11	VSL	1999-11-12	BPA	10	1000.00	22.3	1.0	0.090909032	100	1.7E-08	2.0	-0.00000005	100	1.2E-07	2.0

Table 198: Contents of the raw data file from VSL - Part 1

Label	Lab	Date	Conn	Volt	Freq	Temp	Tempu	ipvr	ipvd	ipvu	ipk	qvr	qdf	qvu	qk
0.9	VSL	1999-11-17	BPA	3	55.00	22.3	1.0	0.89999994	100	1.0E-07	2.0	0.00000008	100	1.0E-06	2.0
0.8	VSL	1999-11-17	BPA	3	55.00	22.3	1.0	0.79999986	100	1.0E-07	2.0	0.00000016	100	1.0E-06	2.0
0.7	VSL	1999-11-17	BPA	3	55.00	22.3	1.0	0.69999986	100	1.0E-07	2.0	0.00000000	100	1.0E-06	2.0
0.6	VSL	1999-11-17	BPA	3	55.00	22.3	1.0	0.59999983	100	1.0E-07	2.0	0.00000004	100	1.0E-06	2.0
0.5	VSL	1999-11-17	BPA	3	55.00	22.3	1.0	0.49999986	100	1.0E-07	2.0	-0.00000017	100	1.0E-06	2.0
0.4	VSL	1999-11-17	BPA	3	55.00	22.3	1.0	0.39999981	100	1.0E-07	2.0	-0.00000013	100	1.0E-06	2.0
0.3	VSL	1999-11-17	BPA	3	55.00	22.3	1.0	0.29999979	100	1.0E-07	2.0	-0.00000004	100	1.0E-06	2.0
0.2	VSL	1999-11-17	BPA	3	55.00	22.3	1.0	0.19999982	100	1.0E-07	2.0	0.00000004	100	1.0E-06	2.0
0.1	VSL	1999-11-17	BPA	3	55.00	22.3	1.0	0.09999984	100	1.0E-07	2.0	0.00000011	100	1.0E-06	2.0
0.01	VSL	1999-11-16	BPA	3	55.00	22.3	1.0	0.0099960	100	2.0E-06	2.0	0.0000036	100	5.0E-06	2.0
10/11	VSL	1999-11-17	BPA	3	55.00	22.3	1.0	0.90909106	100	2.0E-07	2.0	-0.00000030	100	1.0E-06	2.0
9/11	VSL	1999-11-17	BPA	3	55.00	22.3	1.0	0.81818183	100	2.0E-07	2.0	-0.00000016	100	1.0E-06	2.0
8/11	VSL	1999-11-17	BPA	3	55.00	22.3	1.0	0.72727272	100	2.0E-07	2.0	0.00000003	100	1.0E-06	2.0
7/11	VSL	1999-11-17	BPA	3	55.00	22.3	1.0	0.63636353	100	2.0E-07	2.0	0.00000029	100	1.0E-06	2.0
6/11	VSL	1999-11-17	BPA	3	55.00	22.3	1.0	0.54545437	100	2.0E-07	2.0	0.00000044	100	1.0E-06	2.0
5/11	VSL	1999-11-17	BPA	3	55.00	22.3	1.0	0.45454531	100	2.0E-07	2.0	0.00000036	100	1.0E-06	2.0
4/11	VSL	1999-11-17	BPA	3	55.00	22.3	1.0	0.36363603	100	2.0E-07	2.0	0.00000053	100	1.0E-06	2.0
3/11	VSL	1999-11-17	BPA	3	55.00	22.3	1.0	0.27272694	100	2.0E-07	2.0	0.00000043	100	1.0E-06	2.0
2/11	VSL	1999-11-17	BPA	3	55.00	22.3	1.0	0.18181779	100	2.0E-07	2.0	0.00000055	100	1.0E-06	2.0
1/11	VSL	1999-11-17	BPA	3	55.00	22.3	1.0	0.09090875	100	2.0E-07	2.0	0.00000047	100	1.0E-06	2.0

Table 199: Contents of the raw data file from VSL - Part 2