Key comparisons CCEM-K5, EUROMET.EM-K5, EUROMET.EM-K5.1, SIM.EM-K5 and COOMET.EM-K5

Key comparison CCEM-K5

MEASURAND : Electric power at 120 V, 5 A, power factor 1.0, 53 Hz
NOMINAL VALUE : 600 VA, 600 W

x_i : **deviation from nominal measured by laboratory *i***
u_i : **standard combined uncertainty of x_i**

Lab *i*	x_i / (μW/VA)	u_i / (μW/VA)	Date of measurement
NRC	29	6	Jun 96
NIST	26	7	Jul 96
PTB	23	7	Aug 96
SP	-10	15	Sep 96
NIST	27	7	Oct 96
NMIA	31	7	Nov 96
MSL	66	34	Dec 96
NIST	22	7	Feb 97
NPL	38	16	Mar 97
INRIM	23	15	Apr 97
NIST	21	7	May 97
INTI	42	10	Aug 97
NIST	22	7	Sep 97
NIST	20	7	Nov 97
NIM	37	6	Mar 98
NIST	14	7	Apr 98
VNIIM	30	9	Jun 98
NRC	14	6	Sep 98
NIST	9	7	Nov 98
SPRING Singapore	38	31	Dec 98
CSIR-NML	-21	30	Feb 99
NIST	8	7	Mar 99

Lab *i*	x_i / (μW/VA)	u_i / (μW/VA)	Date of measurement
PTB	15	5	May 99
NIST	8	7	Jun 99
INMETRO	6	30	Aug 99
CENAM	19	17	Aug 99
NIST	10	7	Sep 99
NIST	9	7	Jun 00
NIM	20	6	Jul 00
MSL	20	14	Aug 00
NIST	17	7	Aug 00
CSIR-NML	13	40	Sep 00
SP	27	15	Oct 00
NIST	21	7	Nov 00

Key comparisons CCEM-K5, EUROMET.EM-K5, EUROMET.EM-K5.1, SIM.EM-K5 and COOMET.EM-K5

MEASURAND : Electric power at 120 V, 5 A, power factor 1.0, 53 Hz
NOMINAL VALUE : 600 VA, 600 W

Key comparison EUROMET.EM-K5
The results of mesurements obtained by the participants in EUROMET.EM-K5 are given in Table 2 on p. 5 of the Final Report.

Key comparison EUROMET.EM-K5.1
The results of mesurements obtained by the participants in EUROMET.EM-K5.1 are given in Table 2 on p. 7 of the Final Report.

Key comparison SIM.EM-K5
The results of mesurements obtained by the participants in SIM.EM-K5 are given in Tables B.1 to B.8 on pp. 29-36 of the Final Report.

Key comparison COOMET.EM-K5
The results of mesurements obtained by the participants in COOMET.EM-K5 are given in Table 8 pp. 20-22 of the Final Report.

Key comparisons CCEM-K5, EUROMET.EM-K5, EUROMET.EM-K5.1, SIM.EM-K5 and COOMET.EM-K5

Key comparison CCEM-K5

MEASURAND : Electric power at 120 V, 5 A, power factor 0.5 Lead, 53 Hz
NOMINAL VALUE : 600 VA, 300 W

x_i : **deviation from nominal measured by laboratory *i***
u_i : **standard combined uncertainty of x_i**

Lab *i*	x_i / (μW/VA)	u_i / (μW/VA)	Date of measurement
NRC	26	6	Jun 96
NIST	17	7	Jul 96
PTB	9	7	Aug 96
SP	-5	11	Sep 96
NIST	20	7	Oct 96
NMIA	15	8	Nov 96
MSL	27	24	Dec 96
NIST	17	7	Feb 97
NPL	2	13	Mar 97
INRIM	4	15	Apr 97
NIST	12	7	May 97
INTI	20	17	Aug 97
NIST	15	7	Sep 97
NIST	12	7	Nov 97
NIM	-2	4	Mar 98
NIST	5	7	Apr 98
VNIIM	-8	14	Jun 98
NRC	11	6	Sep 98
NIST	5	7	Nov 98
SPRING Singapore	3	31	Dec 98
CSIR-NML	-6	30	Feb 99
NIST	6	7	Mar 99

Lab *i*	x_i / (μW/VA)	u_i / (μW/VA)	Date of measurement
PTB	-1	5	May 99
NIST	8	7	Jun 99
INMETRO	21	30	Aug 99
CENAM	4	17	Aug 99
NIST	4	7	Sep 99
NIST	11	7	Jun 00
NIM	23	6	Jul 00
MSL	16	15	Aug 00
NIST	12	7	Aug 00
CSIR-NML	-1	40	Sep 00
SP	6	11	Oct 00
NIST	11	7	Nov 00

Key comparisons CCEM-K5, EUROMET.EM-K5, EUROMET.EM-K5.1, SIM.EM-K5 and COOMET.EM-K5

MEASURAND : Electric power at 120 V, 5 A, power factor 0.5 Lead, 53 Hz
NOMINAL VALUE : 600 VA, 300 W

Key comparison EUROMET.EM-K5
The results of mesurements obtained by the participants in EUROMET.EM-K5 are given in Table 2 on p. 5 of the Final Report.

Key comparison EUROMET.EM-K5.1
The results of mesurements obtained by the participants in EUROMET.EM-K5.1 are given in Table 2 on p. 7 of the Final Report.

Key comparison SIM.EM-K5
The results of mesurements obtained by the participants in SIM.EM-K5 are given in Tables B.1 to B.8 on pp. 29-36 of the Final Report.

Key comparison COOMET.EM-K5
The results of mesurements obtained by the participants in COOMET.EM-K5 are given in Table 8 pp. 20-22 of the Final Report.

Key comparisons CCEM-K5, EUROMET.EM-K5, EUROMET.EM-K5.1, SIM.EM-K5 and COOMET.EM-K5

Key comparison CCEM-K5

MEASURAND : Electric power at 120 V, 5 A, power factor 0.5 Lag, 53 Hz
NOMINAL VALUE : 600 VA, 300 W

x_i : **deviation from nominal measured by laboratory *i***
u_i : **standard combined uncertainty of x_i**

Lab *i*	x_i / (μW/VA)	u_i / (μW/VA)	Date of measurement
NRC	-27	6	Jun 96
NIST	-24	7	Jul 96
PTB	-18	7	Aug 96
SP	-43	11	Sep 96
NIST	-22	7	Oct 96
NMIA	-20	8	Nov 96
MSL	-4	24	Dec 96
NIST	-25	7	Feb 97
NPL	-4	13	Mar 97
INRIM	-21	15	Apr 97
NIST	-20	7	May 97
INTI	-20	17	Aug 97
NIST	-21	7	Sep 97
NIST	-26	7	Nov 97
NIM	1	4	Mar 98
NIST	-27	7	Apr 98
VNIIM	-53	14	Jun 98
NRC	-37	6	Sep 98
NIST	-30	7	Nov 98
SPRING Singapore	-17	31	Dec 98
CSIR-NML	-45	30	Feb 99
NIST	-32	7	Mar 99

Lab *i*	x_i / (μW/VA)	u_i / (μW/VA)	Date of measurement
PTB	-18	5	May 99
NIST	-34	7	Jun 99
INMETRO	-56	30	Aug 99
CENAM	-28	17	Aug 99
NIST	-30	7	Sep 99
NIST	-28	7	Jun 00
NIM	-36	6	Jul 00
MSL	-37	15	Aug 00
NIST	-21	7	Aug 00
CSIR-NML	-14	40	Sep 00
SP	-14	11	Oct 00
NIST	-22	7	Nov 00

Key comparisons CCEM-K5, EUROMET.EM-K5, EUROMET.EM-K5.1, SIM.EM-K5 and COOMET.EM-K5

MEASURAND : Electric power at 120 V, 5 A, power factor 0.5 Lag, 53 Hz
NOMINAL VALUE : 600 VA, 300 W

Key comparison EUROMET.EM-K5
The results of mesurements obtained by the participants in EUROMET.EM-K5 are given in Table 2 on p. 5 of the Final Report.

Key comparison EUROMET.EM-K5.1
The results of mesurements obtained by the participants in EUROMET.EM-K5.1 are given in Table 2 on p. 7 of the Final Report.

Key comparison SIM.EM-K5
The results of mesurements obtained by the participants in SIM.EM-K5 are given in Tables B.1 to B.8 on pp. 29-36 of the Final Report.

Key comparison COOMET.EM-K5
The results of mesurements obtained by the participants in COOMET.EM-K5 are given in Table 8 pp. 20-22 of the Final Report.

Key comparisons CCEM-K5, EUROMET.EM-K5, EUROMET.EM-K5.1 and COOMET.EM-K5

Key comparison CCEM-K5

MEASURAND : Electric power at 120 V, 5 A, power factor 0.0 Lead, 53 Hz
NOMINAL VALUE : 600 VA, 0 W

x_i : **deviation from nominal measured by laboratory *i***
u_i : **standard combined uncertainty of x_i**

Lab *i*	x_i / (μW/VA)	u_i / (μW/VA)	Date of measurement
NRC	-7	5	Jun 96
NIST	-13	6	Jul 96
PTB	-20	6	Aug 96
SP	-18	9	Sep 96
NIST	-7	6	Oct 96
NMIA	-3	7	Nov 96
MSL	-12	18	Dec 96
NIST	-14	6	Feb 97
NPL	-41	14	Mar 97
INRIM	-27	15	Apr 97
NIST	-16	6	May 97
INTI	-9	19	Aug 97
NIST	-13	6	Sep 97
NIST	-13	6	Nov 97
NIM	-40	5	Mar 98
NIST	-20	6	Apr 98
VNIIM	-8	12	Jun 98
NRC	-15	5	Sep 98
NIST	-17	6	Nov 98
SPRING Singapore	-36	31	Dec 98
CSIR-NML	-32	30	Feb 99
NIST	-18	6	Mar 99

Lab *i*	x_i / (μW/VA)	u_i / (μW/VA)	Date of measurement
PTB	-22	5	May 99
NIST	-18	6	Jun 99
INMETRO	-14	30	Aug 99
CENAM	-34	27	Aug 99
NIST	-23	6	Sep 99
NIST	-15	6	Jun 00
NIM	-14	6	Jul 00
MSL	-18	16	Aug 00
NIST	-12	6	Aug 00
CSIR-NML	-43	40	Sep 00
SP	-25	9	Oct 00
NIST	-21	6	Nov 00

Key comparisons CCEM-K5, EUROMET.EM-K5, EUROMET.EM-K5.1 and COOMET.EM-K5

MEASURAND : Electric power at 120 V, 5 A, power factor 0.0 Lead, 53 Hz
NOMINAL VALUE : 600 VA, 0 W

Key comparison EUROMET.EM-K5
The results of mesurements obtained by the participants in EUROMET.EM-K5 are given in Table 2 on p. 5 of the Final Report.

Key comparison EUROMET.EM-K5.1
The results of mesurements obtained by the participants in EUROMET.EM-K5.1 are given in Table 2 on p. 7 of the Final Report.

Key comparison COOMET.EM-K5
The results of mesurements obtained by the participants in COOMET.EM-K5 are given in Table 8 pp. 20-22 of the Final Report.

Key comparisons CCEM-K5, EUROMET.EM-K5, EUROMET.EM-K5.1 and COOMET.EM-K5

Key comparison CCEM-K5

MEASURAND : Electric power at 120 V, 5 A, power factor 0.0 Lag, 53 Hz
NOMINAL VALUE : 600 VA, 0 W

x_i : **deviation from nominal measured by laboratory *i***
u_i : **standard combined uncertainty of x_i**

Lab *i*	x_i / (μW/VA)	u_i / (μW/VA)	Date of measurement
NRC	-68	5	Jun 96
NIST	-59	6	Jul 96
PTB	-53	6	Aug 96
SP	-60	9	Sep 96
NIST	-63	6	Oct 96
NMIA	-62	7	Nov 96
MSL	-73	18	Dec 96
NIST	-54	6	Feb 97
NPL	-44	14	Mar 97
INRIM	-58	16	Apr 97
NIST	-52	6	May 97
INTI	-50	19	Aug 97
NIST	-53	6	Sep 97
NIST	-55	6	Nov 97
NIM	-37	4	Mar 98
NIST	-55	6	Apr 98
VNIIM	-70	12	Jun 98
NRC	-73	5	Sep 98
NIST	-57	6	Nov 98
SPRING Singapore	-65	31	Dec 98
CSIR-NML	-54	30	Feb 99
NIST	-58	6	Mar 99

Lab *i*	x_i / (μW/VA)	u_i / (μW/VA)	Date of measurement
PTB	-56	5	May 99
NIST	-59	6	Jun 99
INMETRO	-77	30	Aug 99
CENAM	-55	27	Aug 99
NIST	-60	6	Sep 99
NIST	-54	6	Jun 00
NIM	-72	6	Jul 00
MSL	-69	16	Aug 00
NIST	-52	6	Aug 00
CSIR-NML	-57	40	Sep 00
SP	-47	9	Oct 00
NIST	-57	6	Nov 00

Key comparisons CCEM-K5, EUROMET.EM-K5, EUROMET.EM-K5.1 and COOMET.EM-K5

MEASURAND : Electric power at 120 V, 5 A, power factor 0.0 Lead, 53 Hz
NOMINAL VALUE : 600 VA, 0 W

Key comparison EUROMET.EM-K5
The results of mesurements obtained by the participants in EUROMET.EM-K5 are given in Table 2 on p. 5 of the Final Report.

Key comparison EUROMET.EM-K5.1
The results of mesurements obtained by the participants in EUROMET.EM-K5.1 are given in Table 2 on p. 7 of the Final Report.

Key comparison COOMET.EM-K5
The results of mesurements obtained by the participants in COOMET.EM-K5 are given in Table 8 pp. 20-22 of the Final Report.

Key comparisons CCEM-K5, EUROMET.EM-K5, EUROMET.EM-K5.1, SIM.EM-K5 and COOMET.EM-K5

MEASURAND : Electric power at 120 V, 5 A, 53 Hz **POWER FACTOR : 1.0, 0.5 Lead, 0.5 Lag, 0.0 Lead, 0.0 Lag**

Key comparison CCEM-K5

For each power factor, the key comparison reference value, x_R, is calculated as the weighted mean of the difference between laboratory i and the predicted value, based on measurements performed at the pilot laboratory. Its standard uncertainty, u_R, is calculated as the uncertainty of the weighted mean of the differences.

Power factor	x_R / (μW/VA)	u_R / (μW/VA)
1.0	7	5
0.5 Lead	-1	5
0.5 Lag	-1	5
0.0 Lead	0	5
0.0 Lag	-3	5

The degree of equivalence of each laboratory with respect to the key comparison reference value is given by a pair of terms: D_i and U_i, its expanded uncertainty (k = 2), both expressed in μW/VA. The derivation of these terms can be found in the CCEM-K5 Final Report.

The degree of equivalence between two laboratories is given by a pair of terms: D_{ij} and U_{ij}, its expanded uncertainty (k = 2), both expressed in μW/VA. The derivation of these terms can be found in the CCEM-K5 Final Report.

Linking EUROMET.EM-K5 and EUROMET.EM-K5.1 to CCEM-K5

For each power factor the linkage between EUROMET.EM-K5 and CCEM-K5, or EUROMET.EM-K5.1 and CCEM-K5, is computed as explained in the corresponding Linkage Report.

The INRIM, NPL and PTB ensure the linkage between EUROMET.EM-K5 and CCEM-K5, and PTB between EUROMET.EM-K5.1 and CCEM-K5

Linking SIM.EM-K5.1 to CCEM-K5

It was possible to link SIM.EM-K5 results to those of CCEM-K5 for the power factors 1.0, 0.5 Lead and 0.5 Lag as explained in the Addendum to the SIM.EM-K5 Final Report.

NIST, NRC, INTI, INMETRO and CENAM ensure the linkage.

Linking COOMET.EM-K5 to CCEM-K5

The results obtained in COOMET.EM-K5 for each power factor was linked to CCEM-K5 via NIM and VNIIM who participated in both comparisons. The linking process is described in a complement to the COOMET.EM-K5 Final Report.

Key comparisons CCEM-K5, EUROMET.EM-K5, EUROMET.EM-K5.1, SIM.EM-K5 and COOMET.EM-K5

MEASURAND : Electric power at 120 V, 5 A, 53 Hz
POWER FACTOR : 1.0

Lab *i*	D_i / (µW/VA)	U_i / (µW/VA)
NIST	-7	12
NMIA	-1	14
NPL	8	32
INRIM	-7	30
INTI	15	20
VNIIM	10	18
NRC	-4	14
NMC, A*STAR	22	62
PTB	0	10
INMETRO	-9	60
CENAM	4	34
NIM	-1	12
MSL	-2	28
NMISA	-12	80
SP	1	30

	D_i / (µW/VA)	U_i / (µW/VA)
AREPA	-1	97
INETI	-3	76
SMD	54	46
BEV	-58	75
METAS	-13	60
CMI	6	75
MKEH	47	172
JV	29	74
CEM	-2	71
GUM	23	80
MIKES	42	43
VSL	18	27
UME	15	77

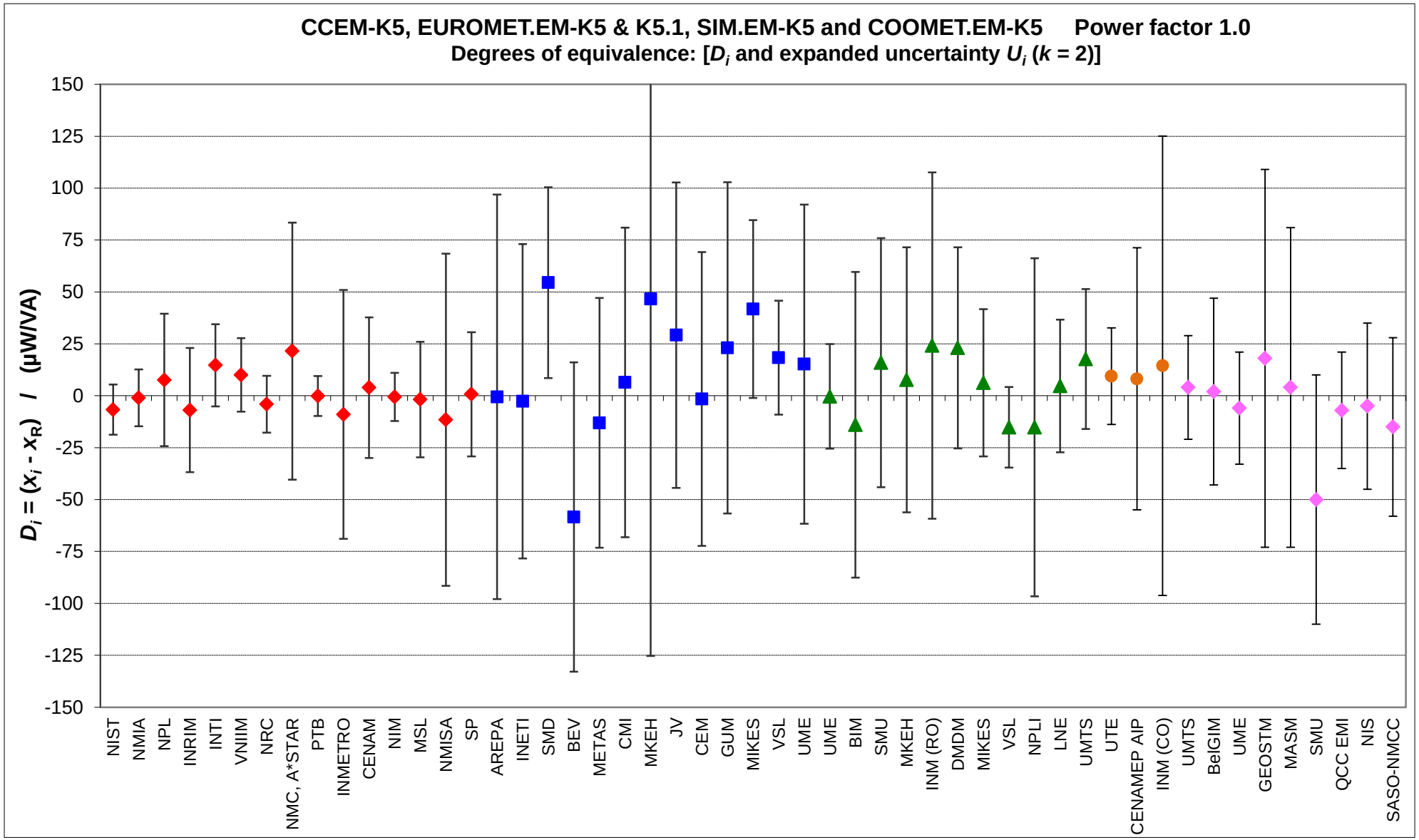
	D_i / (µW/VA)	U_i / (µW/VA)
UME	0	25
BIM	-14	74
SMU	16	60
MKEH	8	64
INM (RO)	24	83
DMDM	23	48
MIKES	6	35
VSL	-15	19
NPLI	-15	81
LNE	5	32
UMTS	18	34

	D_i / (µW/VA)	U_i / (µW/VA)
UTE	9	23
CENAMEP AIP	8	63
INM (CO)	14	111

	D_i / (µW/VA)	U_i / (µW/VA)
UMTS	4	25
BelGIM	2	45
UME	-6	27
GEOSTM	18	91
MASM	4	77
SMU	-50	60
QCC EMI	-7	28
NIS	-5	40
SASO-NMCC	-15	43

Red: CCEM-K5
Blue: EUROMET.EM-K5
Green: EUROMET.EM-K5.1
Orange: SIM.EM-K5
Purple: COOMET.EM-K5

The acronym "UMTS" stands for SE "Ukrmetrteststandard"



Red diamonds: CCEM-K5
Blue squares: EUROMET.EM-K5
Green triangles: EUROMET.EM-K5.1
Orange circles: SIM.EM-K5
Purple diamonds: COOMET.EM-K5

Key comparisons CCEM-K5, EUROMET.EM-K5, EUROMET.EM-K5.1, SIM.EM-K5 and COOMET.EM-K5

MEASURAND : Electric power at 120 V, 5 A, 53 Hz
POWER FACTOR : 0.5 Lead

Lab *i*	D_i / (µW/VA)	U_i / (µW/VA)
NIST	1	12
NMIA	-1	16
NPL	-12	26
INRIM	-10	30
INTI	9	34
VNIIM	-15	28
NRC	5	12
NMC, A*STAR	-3	62
PTB	-7	10
INMETRO	15	60
CENAM	-2	34
NIM	13	12
MSL	5	30
NMISA	-14	80
SP	-8	22

	D_i / (µW/VA)	U_i / (µW/VA)
AREPA	-30	102
INETI	-19	152
SMD	11	44
BEV	-28	73
METAS	3	53
CMI	-28	64
MKEH	-28	171
JV	5	72
CEM	-60	69
GUM	-1	78
MIKES	0	29
VSL	-23	54
UME	29	76

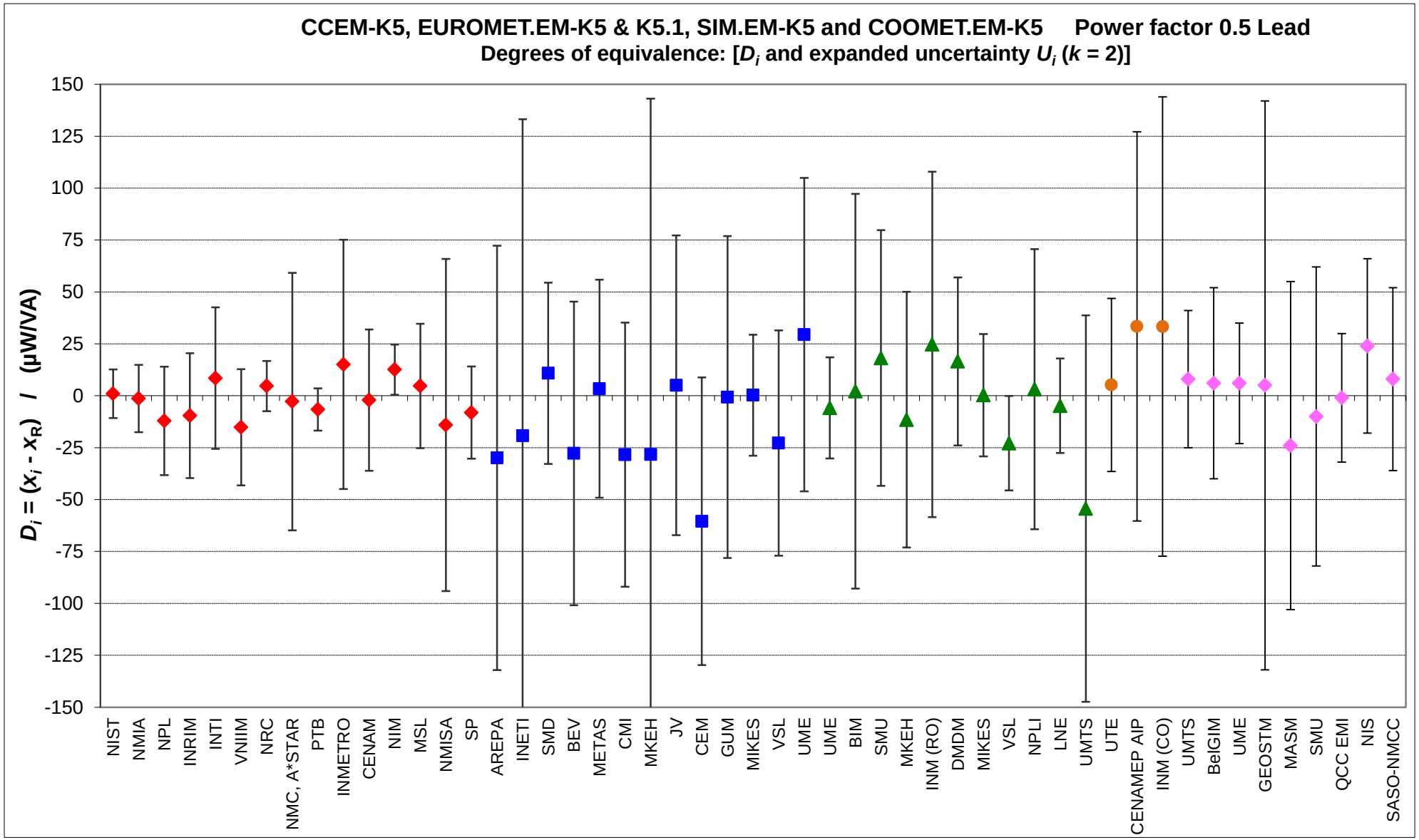
	D_i / (µW/VA)	U_i / (µW/VA)
UME	-6	24
BIM	2	95
SMU	18	62
MKEH	-12	62
INM (RO)	25	83
DMDM	17	40
MIKES	0	29
VSL	-23	23
NPLI	3	67
LNE	-5	23
UMTS	-54	93

	D_i / (µW/VA)	U_i / (µW/VA)
UTE	5	42
CENAMEP AIP	33	94
INM (CO)	33	111

	D_i / (µW/VA)	U_i / (µW/VA)
UMTS	8	33
BelGIM	6	46
UME	6	29
GEOSTM	5	137
MASM	-24	79
SMU	-10	72
QCC EMI	-1	31
NIS	24	42
SASO-NMCC	8	44

Red: CCEM-K5
Blue: EUROMET.EM-K5
Green: EUROMET.EM-K5.1
Orange: SIM.EM-K5
Purple: COOMET.EM-K5

The acronym "UMTS" stands for SE "Ukrmetrteststandard"



Red diamonds: CCEM-K5
Blue squares: EUROMET.EM-K5
Green triangles: EUROMET.EM-K5.1
Orange circles: SIM.EM-K5
Purple diamonds: COOMET.EM-K5

Key comparisons CCEM-K5, EUROMET.EM-K5, EUROMET.EM-K5.1, SIM.EM-K5 and COOMET.EM-K5

MEASURAND : Electric power at 120 V, 5 A, 53 Hz
POWER FACTOR : 0.5 Lag

Lab *i* ⇩	D_i / (µW/VA)	U_i / (µW/VA)
NIST	1	12
NMIA	3	16
NPL	19	26
INRIM	2	30
INTI	4	34
VNIIM	-25	28
NRC	-3	12
NMC, A*STAR	13	62
PTB	12	10
INMETRO	-26	60
CENAM	2	34
NIM	-14	12
MSL	-16	30
NMISA	3	80
SP	1	22

	D_i / (µW/VA)	U_i / (µW/VA)
AREPA	14	102
INETI	18	195
SMD	49	44
BEV	3	73
METAS	-4	53
CMI	-3	64
MKEH	75	171
JV	35	72
CEM	82	69
GUM	23	78
MIKES	33	29
VSL	32	54
UME	-25	76

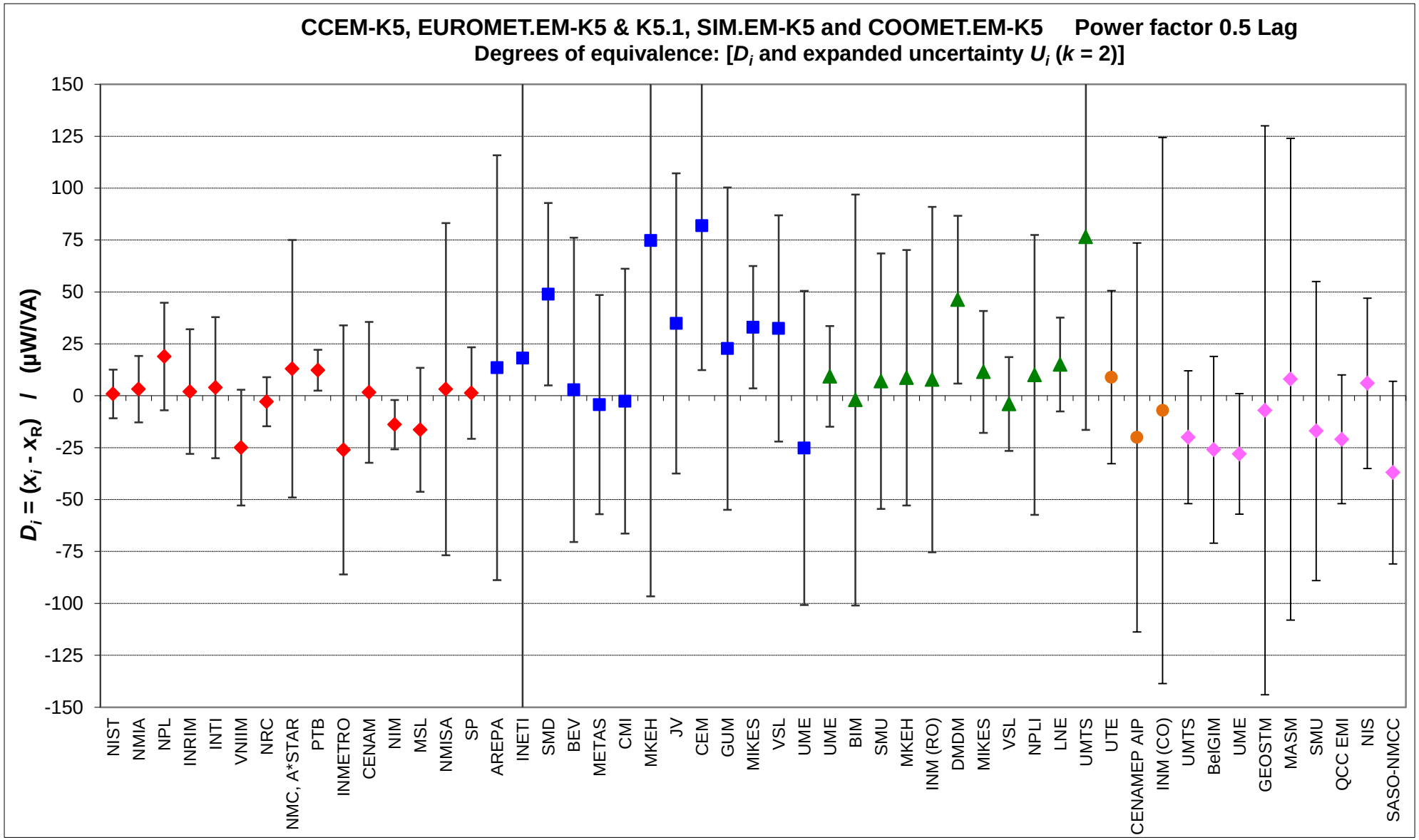
	D_i / (µW/VA)	U_i / (µW/VA)
UME	9	24
BIM	-2	99
SMU	7	62
MKEH	9	62
INM (RO)	8	83
DMDM	46	40
MIKES	11	29
VSL	-4	23
NPLI	10	67
LNE	15	23
UMTS	77	93

	D_i / (µW/VA)	U_i / (µW/VA)
UTE	9	42
CENAMEP AIP	-20	94
INM (CO)	-7	132

	D_i / (µW/VA)	U_i / (µW/VA)
UMTS	-20	32
BelGIM	-26	45
UME	-28	29
GEOSTM	-7	137
MASM	8	116
SMU	-17	72
QCC EMI	-21	31
NIS	6	41
SASO-NMCC	-37	44

Red: CCEM-K5
Blue: EUROMET.EM-K5
Green: EUROMET.EM-K5.1
Orange: SIM.EM-K5
Purple: COOMET.EM-K5

The acronym "UMTS" stands for SE "Ukrmetrteststandard"



Red diamonds: CCEM-K5
Blue squares: EUROMET.EM-K5
Green triangles: EUROMET.EM-K5.1

Orange circles: SIM.EM-K5
Purple diamonds: COOMET.EM-K5

U_{INETI} = 195 µW/VA

Key comparisons CCEM-K5, EUROMET.EM-K5, EUROMET.EM-K5.1, SIM.EM-K5 and COOMET.EM-K5

MEASURAND : Electric power at 120 V, 5 A, 53 Hz
POWER FACTOR : 0.0 Lead

Lab *i* ⇩	D_i / (µW/VA)	U_i / (µW/VA)
NIST	0	9
NMIA	9	15
NPL	-28	29
INRIM	-14	31
INTI	6	39
VNIIM	9	25
NRC	7	12
NMC, A*STAR	-18	62
PTB	-4	12
INMETRO	4	60
CENAM	-16	54
NIM	3	13
MSL	-1	33
NMISA	-26	80
SP	-9	19

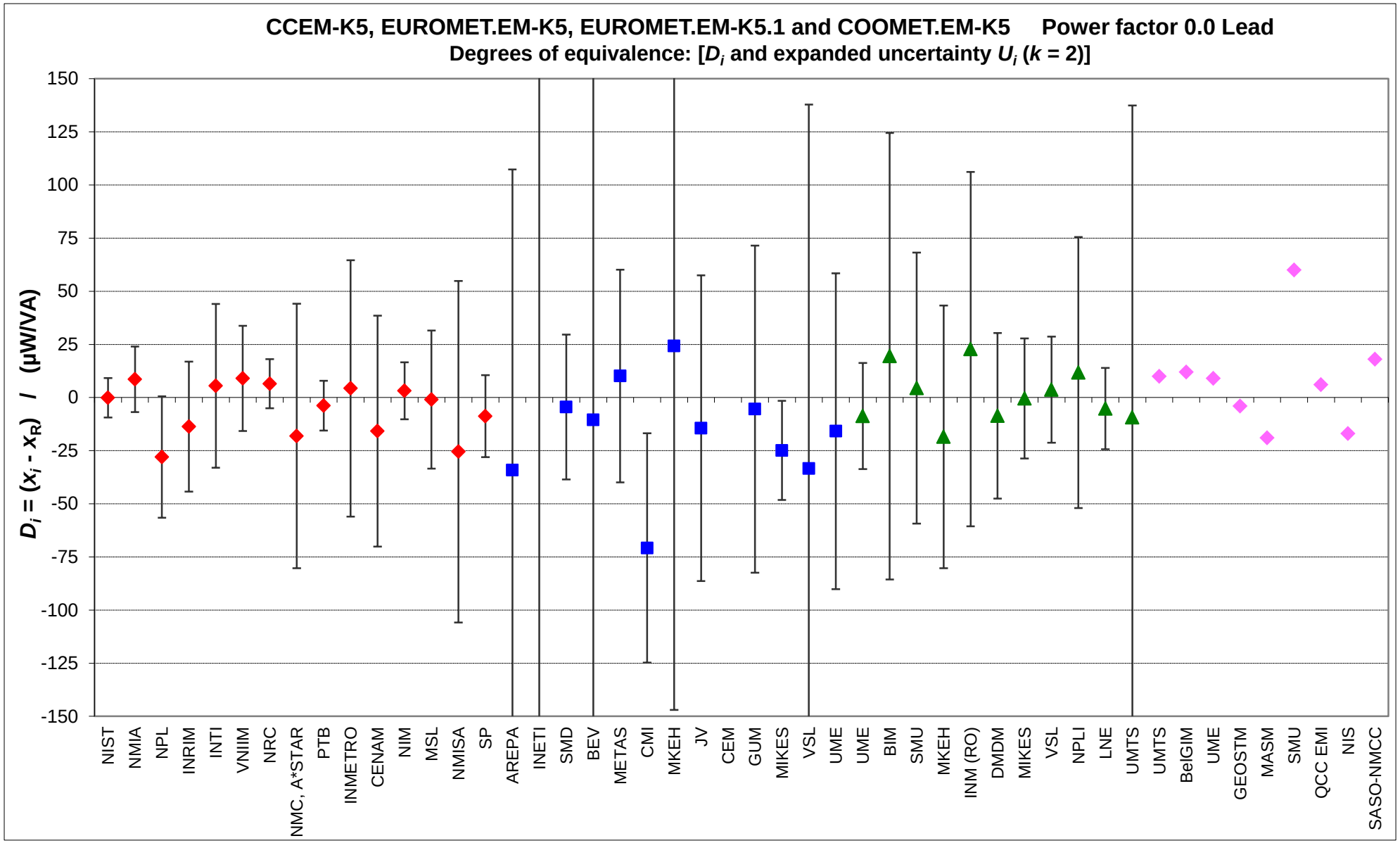
	D_i / (µW/VA)	U_i / (µW/VA)
AREPA	-34	141
INETI	-230	482
SMD	-4	34
BEV	-10	221
METAS	10	50
CMI	-71	54
MKEH	24	171
JV	-14	72
CEM	-	-
GUM	-5	77
MIKES	-25	23
VSL	-33	171
UME	-16	74

	D_i / (µW/VA)	U_i / (µW/VA)
UME	-9	25
BIM	19	105
SMU	4	64
MKEH	-19	62
INM (RO)	23	83
DMDM	-9	39
MIKES	0	28
VSL	4	25
NPLI	12	64
LNE	-5	19
UMTS	-9	147

	D_i / (µW/VA)	U_i / (µW/VA)
UMTS	10	30
BelGIM	12	45
UME	9	28
GEOSTM	-4	204
MASM	-19	86
SMU	60	79
QCC EMI	6	27
NIS	-17	42
SASO-NMCC	18	45

Red: CCEM-K5
Blue: EUROMET.EM-K5
Green: EUROMET.EM-K5.1
Purple: COOMET.EM-K5

The acronym "UMTS" stands for SE "Ukrmetrteststandard"



Red diamonds: CCEM-K5
Blue squares: EUROMET.EM-K5
Green triangles: EUROMET.EM-K5.1

Purple diamonds: COOMET.EM-K5

D_{INETI} = -230 µW/VA and U_{INETI} = 482 µW/VA
U_{MKEH} = 171 µW/VA
U_{BEV} = 221 µW/VA

Key comparisons CCEM-K5, EUROMET.EM-K5, EUROMET.EM-K5.1, SIM.EM-K5 and COOMET.EM-K5

MEASURAND : Electric power at 120 V, 5 A, 53 Hz
POWER FACTOR : 0.0 Lag

Lab *i* ⇩	D_i / (µW/VA)	U_i / (µW/VA)
NIST	3	9
NMIA	-2	15
NPL	14	28
INRIM	0	32
INTI	7	38
VNIIM	-11	24
NRC	-11	11
NMC, A*STAR	-4	62
PTB	7	11
INMETRO	-13	60
CENAM	9	54
NIM	-7	13
MSL	-4	32
NMISA	7	80
SP	17	19

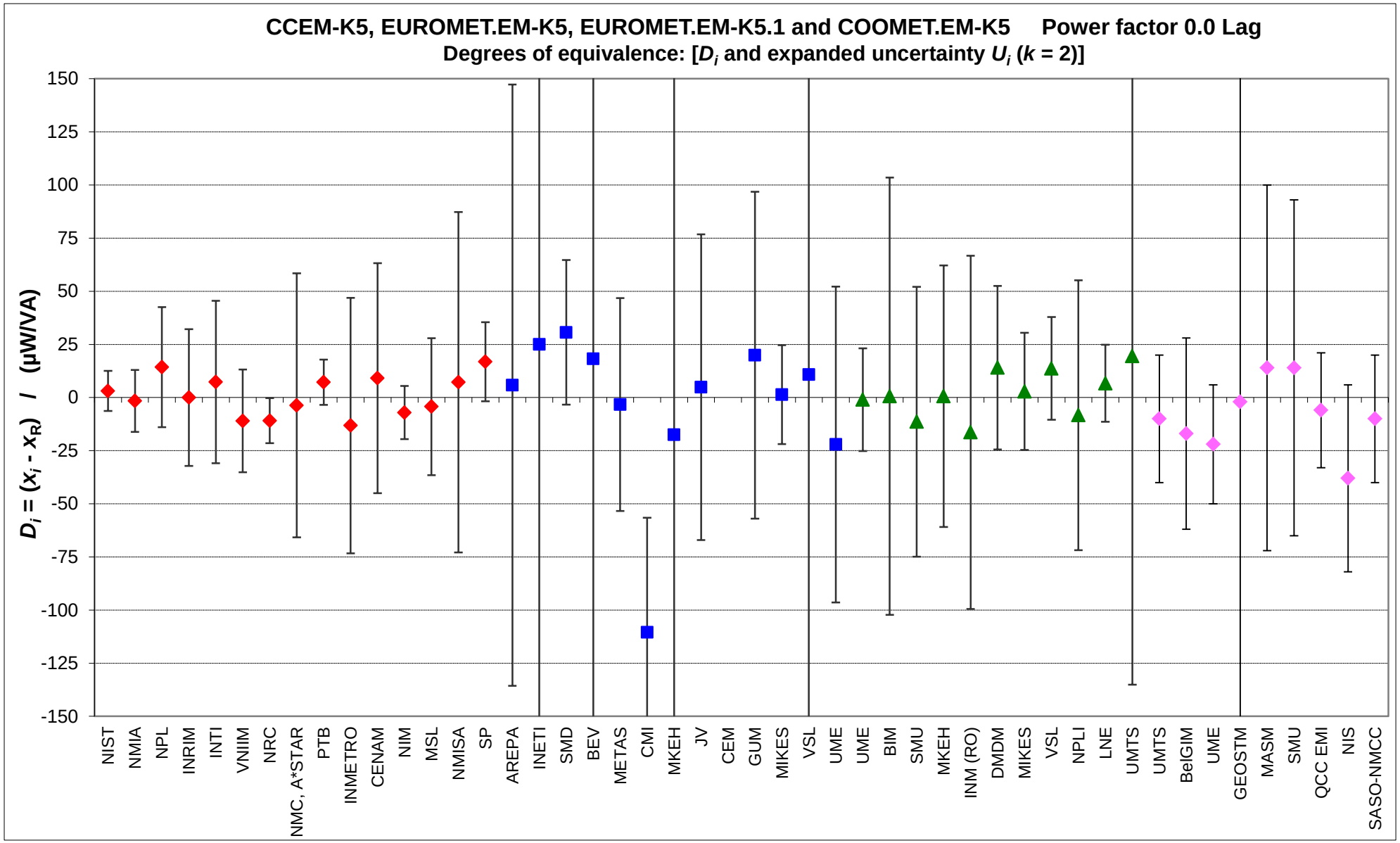
	D_i / (µW/VA)	U_i / (µW/VA)
AREPA	6	141
INETI	25	296
SMD	31	34
BEV	18	221
METAS	-3	50
CMI	-110	54
MKEH	-18	171
JV	5	72
CEM	-	-
GUM	20	77
MIKES	1	23
VSL	11	171
UME	-22	74

	D_i / (µW/VA)	U_i / (µW/VA)
UME	-1	24
BIM	1	103
SMU	-11	63
MKEH	1	62
INM (RO)	-16	83
DMDM	14	38
MIKES	3	28
VSL	14	24
NPLI	-8	63
LNE	7	18
UMTS	19	155

	D_i / (µW/VA)	U_i / (µW/VA)
UMTS	-10	30
BelGIM	-17	45
UME	-22	28
GEOSTM	-2	204
MASM	14	86
SMU	14	79
QCC EMI	-6	27
NIS	-38	44
SASO-NMCC	-10	30

Red: CCEM-K5
Blue: EUROMET.EM-K5
Green: EUROMET.EM-K5.1
Purple: COOMET.EM-K5

The acronym "UMTS" stands for SE "Ukrmetrteststandard"



Red diamonds: CCEM-K5 **Purple diamonds: COOMET.EM-K5**

Blue squares: EUROMET.EM-K5

Green triangles: EUROMET.EM-K5.1

U_{MKEH} = 171 µW/VA U_{VSL} = 171 µW/VA

U_{INETI} = 296 µW/VA U_{BEV} = 221 µW/VA