COOMET report

CCPR meeting

September 2016

COOMET TC “Photometry and Radiometry”

Actual Members:

2014	2016	
Russia	Russia	Uzbekistan
Ukraine	Ukraine	Tajikistan
Belarus	Belarus	Azerbaijan
Kazakhstan	Kazakhstan	Georgia
Slovakia	Slovakia	
Germany	Germany	
Moldova	Moldova	
Cuba	Turkey	
	China	

COOMET comparison progress

Since Sep. 2014

5 new comparison have been started

1 comparison has been completed

Overall number of Ongoing comparisons: 10

Key Comparison: 3

Supplementary Comparison: 7

COOMET comparison progress

Completed Comparison

Refractive index COOMET.PR-S3

COOMET project 438/RU/08

Participants:
VNIIOFI (Russia) – pilot
PTB (Germany)
Ukrmetrteststandart (Ukraine)
AIST (Japan)
INRiM (Italy)

Final report published in March 2016

Metrologia, *2016*, ***53***, *Tech. Suppl.*, *02001*

COOMET comparison progress

I. Ongoing Key comparison

COOMET Project #	KCDB registration	Subject	Participants	Status	Start of Meas.	End of Meas.
368/BY/06	COOMET.PR-K3.a	**Luminous intensity** Tungsten lamps, 500 cd	BelGIM (Belarus) - pilot VNIIOFI (Russia) - link SMU (Slovakia) - link IM (Ukraine) KszInMetr (Kazakhstan)	Draft-A	Nov 2010	2014
653/RU/14	COOMET.PR-K1.b.1 Bilateral	**Spectral Irradiance 200 nm to 350 nm** Deuterium lamps	VNIIOFI (Russia) – pilot PTB (Germany) - link	Measurements in progress	Jan 2015	**2016**
636/UA/14	COOMET.PR-K4.1 Bilateral	**Luminous flux** Tungsten lamps, 3500 lm	IM (Ukraine) - pilot VNIIOFI (Russia) - link	**Draft-A**	May 2015	May 2015

COOMET comparison progress

II. Ongoing Supplementary comparison

COOMET Project #	KCDB registration	Subject	Participants	Status	Start of Meas.	End of Meas.
366/RU/06	COOMET.PR-S1	**Whiteness and Brightness** CIE whiteness and R457 brightness (in accordance with ISO 2469 and ISO 2470), geometry D/0, 70-130, dimensionless.	VNIIOFI (Russia) - pilot BelGIM (Belarus) Ukrmetrteststandart (Ukraine)	**Pre Draft-A**	2012	2014
439/RU/08	COOMET.PR-S2	**Angle of rotation of plane of polarization**	VNIIOFI (Russia) – pilot PTB (Germany) Ukrmetrteststandart (Ukraine) GUM (Poland)	**Draft-B**	2011	2013
429/CU/08	COOMET.PR-S5	**Spectral regular transmittance** wavelength range: 250 nm to 635 nm	INIMET (Cuba) - pilot BelGIM (Belarus) INMETRO (Brazil) SMU (Slovakia) Ukrmetrteststandart (Ukraine)	**Pre Draft-A**	2010	2012
599/RU/13	COOMET.PR-S7	**Laser power responsivity** 532 nm, 1064 nm and 10.6 μm Power 1 W	VNIIOFI (Russia) – pilot NIST (USA)	**Pre Draft-A**	2013	2015

COOMET comparison progress

II. Ongoing Supplementary comparison (started after 2014)

COOMET Project #	KCDB registration	Subject	Participants	Status	Start of Meas.	End of Meas.
689/RU/16	COOMET.PR-S8	**Wavelength** (Fiber optics) wavelength range: 1525 nm to 1565 nm	VNIIOFI (Russia) - pilot BelGIM (Belarus) NIM (China) PTB (Germany) INMETRO (Brazil) NMISA (South Africa)	Measurements in progress	2016	2017
688/RU/16	COOMET.PR-S9	**Polarization mode dispersion (PMD)** in Optical Fiber 0.3 ps, 0.5 ps and 5 ps	VNIIOFI (Russia) – pilot KRISS (R. Korea) CENAM (Mexico) INMETRO (Brazil) NMISA (South Africa)	Measurements in progress	2016	2017
640/BY/14	COOMET.PR-S10	**Colour, transmitted**	BelGIM (Belarus) - pilot VNIIOFI (Russia) NSC IM (Ukraine) INM (Moldova) KazInMetr (Kazakhstan) NIMT (Thailand) UME (Turkey) NIM (China)	Protocol approved	2016	2017

COOMET comparison progress

III. Planning comparison

1 **Color, surface**
Participants: BelGIM (Belarus), VNIIOFI (Russia), IM (Ukraine), NIM (Moldova), KazInMetr (Kazakhstan), NIMT (Thailand)
Pilot - BelGIM (Belarus)
Start: 2017?

2 **COOMET.PR-K1a Spectral Irradiance 250-2500 nm**
Participants: BelGIM (Belarus), NSC IM (Ukraine), UME (Turkey), VNIIOFI (Russia) – pilot, link
PTB (Germany) - link
Start: right after CCPR-K1a (2018?)

Published CMCs

BelGIM (Belarus): 10 CMCs

8 in Photometry (EURAMET.PR-K3a)

2 in Fibre Optics (COOMET.PR-S6)

VNIIOFI (Russia): 2 CMCs in Fibre Optics (COOMET.PR-S6)