



Schweizerische Eidgenossenschaft
Confédération suisse
Confederazione Svizzera
Confederaziun svizra

Federal Institute of Metrology METAS



BxDiff – WP1

BRDF measurement comparison - first results

Objectives



Samples:

- Labsphere BRDF-99-020, SN: 99AA04-0919-3368, 99%
- Labsphere BRDF-50-020, SN: 50AA01-1219-3365, 50%
- NCS gloss sample, SN:5A, GU = 20

Participants:

- CSIC, CNAM, METAS, CMI, PTB, CI

The measurand is the BRDF:

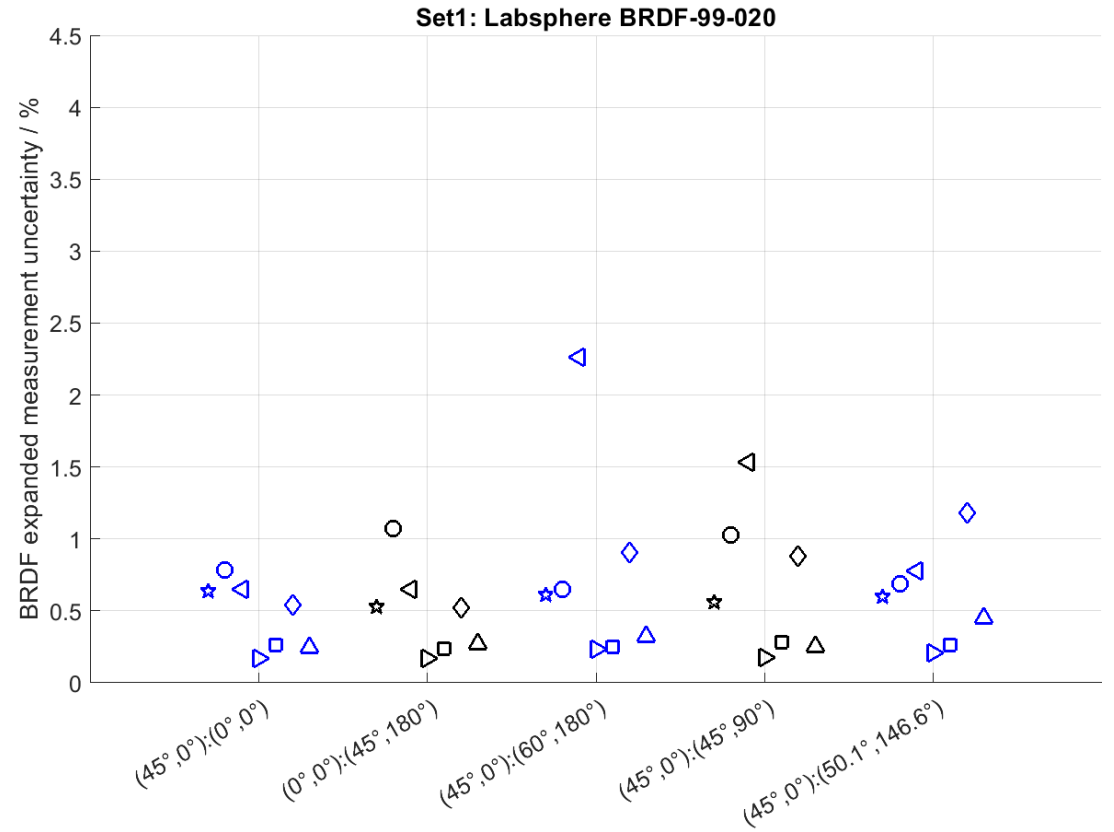
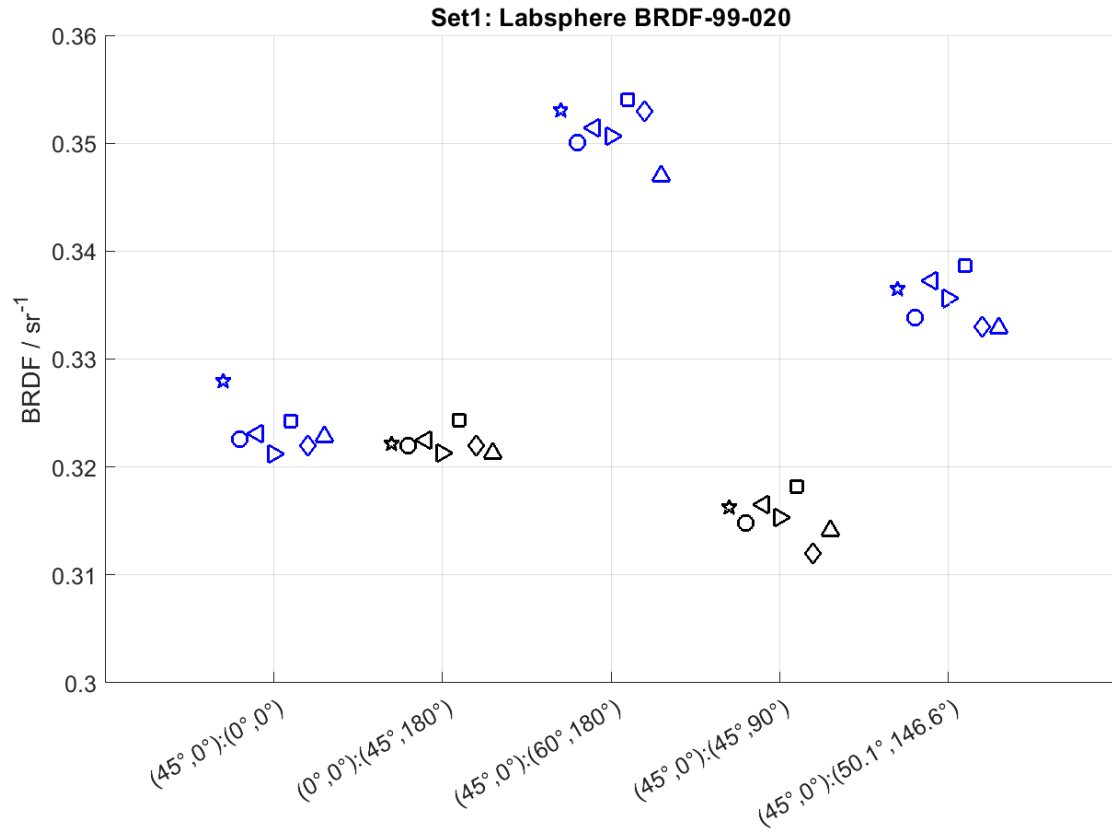
- of a 10 mm diameter area
- in the center of each sample
- in the above defined geometries
- for unpolarized light of
- 550 nm
- with a 5 nm bandwidth

Other conditions of measurement:

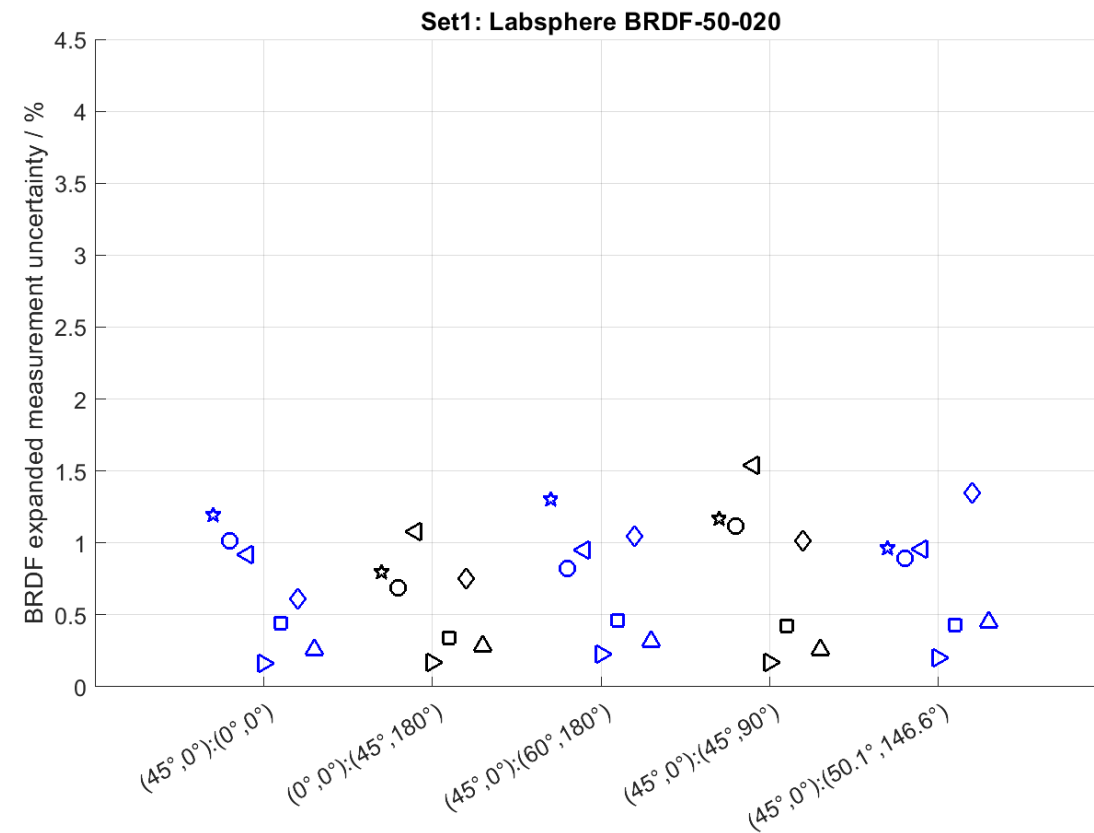
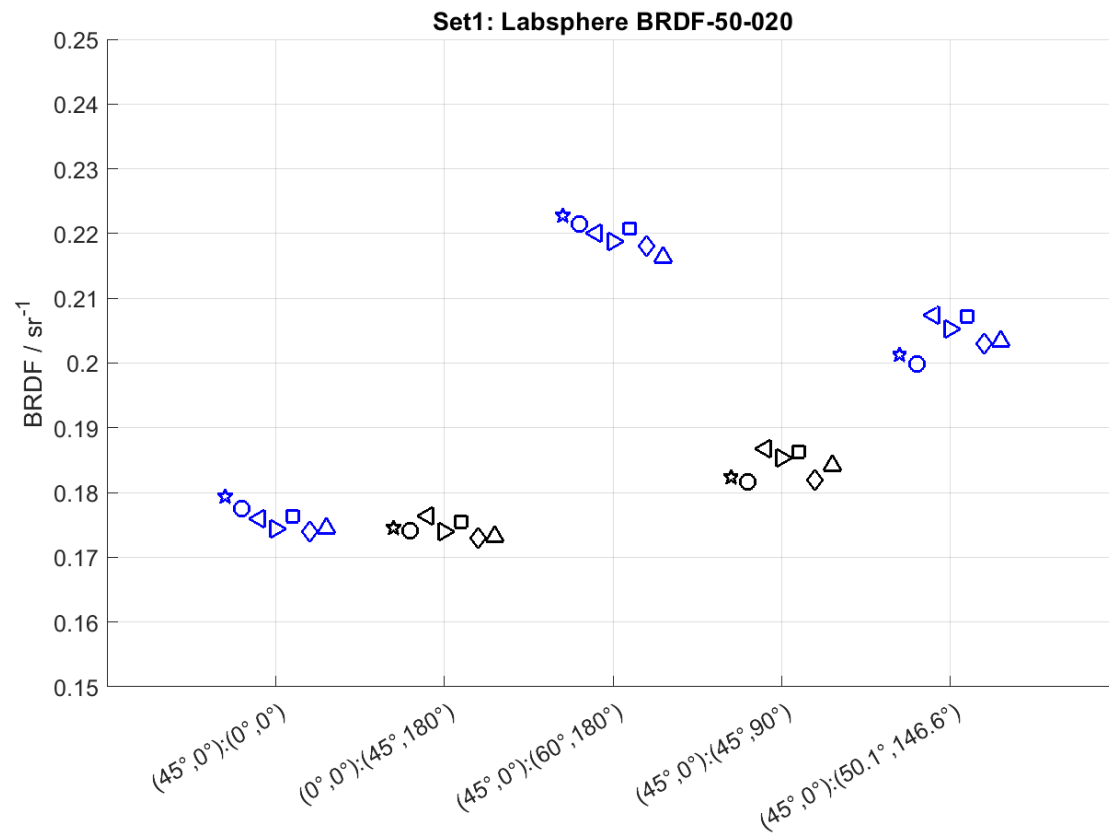
- the room temperature during the measurements should be constant and reported
- the solid angles should be reported

		targeted measurement uncertainty (k=2)
in-plane	(45°, 0°) : (0°, 0°)	0.1%
	(0°, 0°) : (45°, 180°)	
	(45°, 0°) : (60°, 180°)	
out-of-plane	(45°, 0°) : (45°, 90°)	< 4%
	(45°, 0°) : (50.1°, 146.6°)	

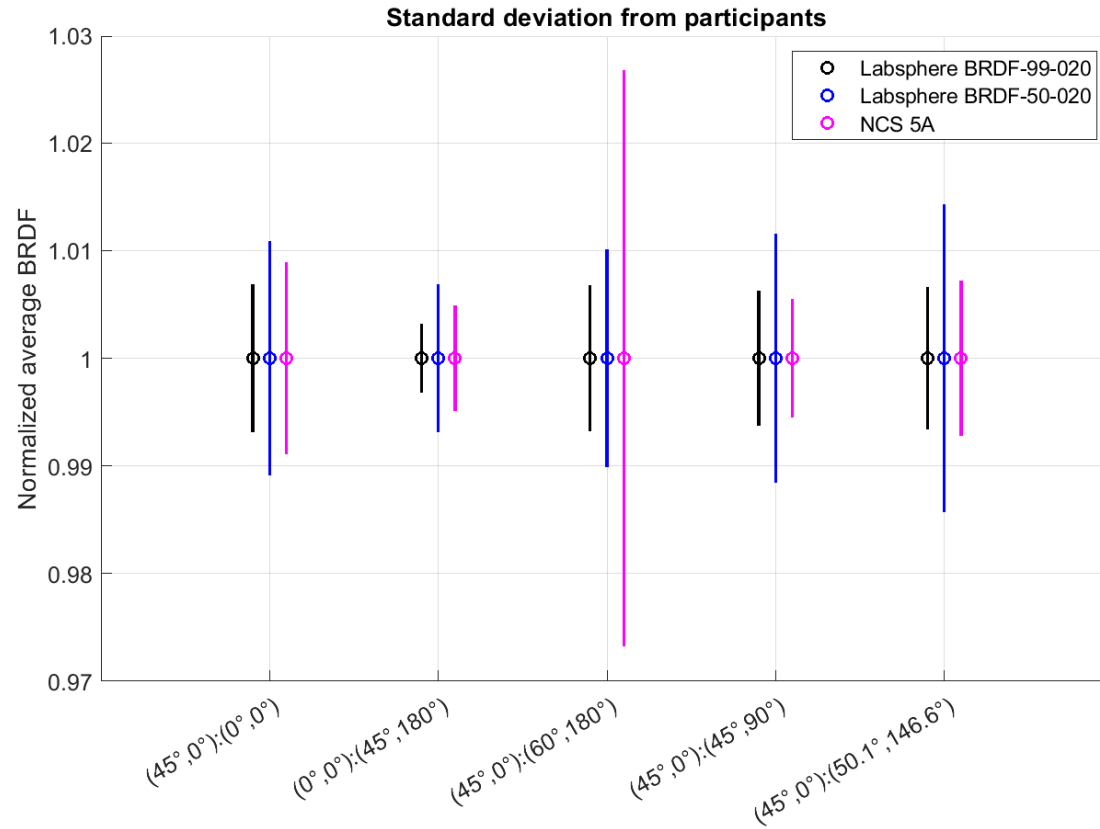
First results



First results



First results



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Thank you for your attention