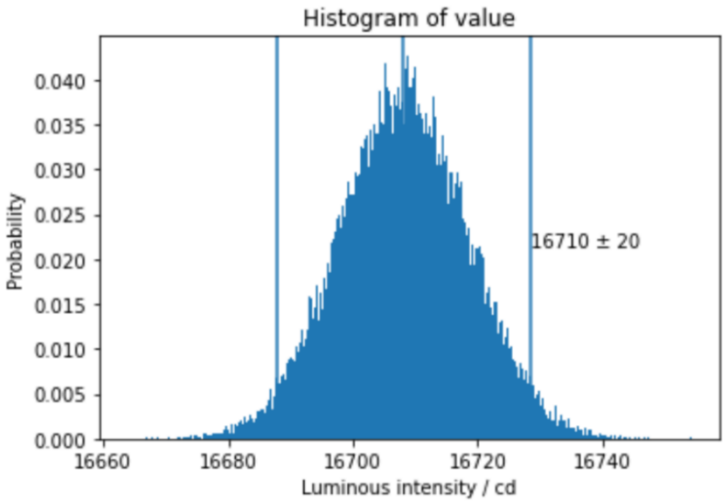
Training session on uncertainty of correlated spectral data
EMPIR 19NRM02 RevStdLED

On 24 July, 2023, a free of charge training session on photometric and radiometric calibrations using spectral data and considering correlations and related uncertainty aspects will be held as an online event.
Lecturers of the training are relevant representatives from the consortium of the EMPIR JRP project 19NRM02 RevStdLED “Revision and extension of standards for test methods for LED lamps, luminaires and modules” which addresses **“spectrally correlated measurements used to calculate integral photometric quantities”** inside its Work Package 2.

Content:
Starting from simple examples of uncertainty evaluation in photometry, the training course will be about how to implement a Monte Carlo method to simulate a measurement, i.e. to determine the probability distribution and thus the uncertainty of an output quantity based on the standard deviation of the spectral input parameters and their correlations.
Beside theoretical lectures on the development of measurement models, practical examples will be explained and shared in the training based on “empir19nrm02”, a Python toolbox on the GitHub repository for photometric and colorimetric measurement, which was developed by project partners. This toolbox includes commented software modules written in Python helpful to investigate uncertainties and to reveal uncertainties of integral spectral quantities.



Targeted audience and prerequisites:
The course is aimed at people who carry out spectral photometric and radiometric measurements and have to deal with the determination uncertainty. Participants are expected to already have substantial knowledge about photometric measurements and uncertainty calculation. In particular, participants are expected to be familiar with the CIE S 025/E:2015 “Test Method for LED Lamps, LED Luminaires and LED Modules”, the CIE 198 “Determination of measurement uncertainties in photometry” including Supplement 1 with all parts and Supplement 2 and with the basics of JCGM 100:2008 “Guide to the expression of uncertainty in measurement (GUM)” including its Supplement 1 (JCGM 101:2008) and Supplement 2 (JCGM 102:2011).

Registration for the Training:
Please register for the training session via E-mail to zuhal.kosemen@tubitak.gov.tr by 2023 July 20th.
In order to coordinate the training content, please also provide us with information about your special field of interest, your affiliation and your level of experience (beginner, advanced,

expert) with your registration. The data collected will be used exclusively for the training. Subsequently, a confirmation of registration and detailed information about the agenda including the training link will be provided.

Administrative Information:
The training session is provided free of charge. Registration in advance to the training session is required.

Date	: 24. July 2023
Registration	: by 20th July 2023 via E-mail
E-mail	: zuhal.kosemen@tubitak.gov.tr
Contact	: Dr. Zühal Alpaslan Kösemen, Phone: +90 262 679 5000 ext 3302

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