

Consultative Committee for Photometry and Radiometry (CCPR)
24th Meeting (19 - 20 September 2019)

Questionnaire on activities in radiometry and photometry

Reply from: National Center of Metrology of Mexico (CENAM)

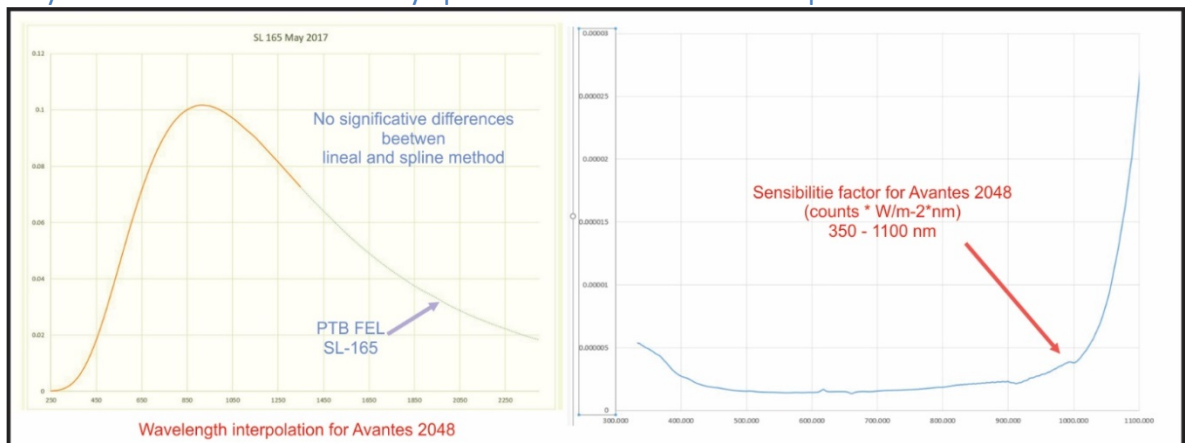
Delegate: Hector A. Castillo M.

1. Summarize the progress in your laboratory in realizing top-level standards of:
 - (a) broad-band radiometric quantities :
 - (b) spectral radiometric quantities :
 - (c) photometric quantities :
2. What other work has taken place in your laboratory in scientific or technological areas relevant to the CCPR?

Under development, spectral responsivity of primary solar cells (Diferential spectral responsivity system)



A system for calibration of array spectrometers has been setup.



2nd generation of large area solar simulators characterization system.



3. What work in PR has been/will be terminated in your laboratory, if any, in the past /future few years? Please provide the name of the institution if it has been/will be substituted by a DI or accredited laboratory.

In the next year, a cryogenic radiometer base on special absorber for optical fiber sources will be under test (collaboration with NIST)



4. What are present, new or emerging needs of users of your services that are not being supported sufficiently by current CCPR activities or initiatives? In the light of this information please suggest desirable changes in the future working program of the CCPR.

none

5. What priorities do you suggest for new research and development programmes at NMIs in the area of Photometry and Radiometry?

Primary standards, other than cryogenic radiometer.

6. Are there any research projects where you might be looking for collaborators from other NMIs or are there studies that might be suitable for collaboration or coordination between NMIs?

New LED reference sources.

7. Have you got any other information to place before the CCPR in advance of its next meeting?

none

8. Bibliography of radiometry and photometry papers of your laboratory since the last CCPR (September 2016)?

- Carlos H. Matamoros, "La candela en la evolución del SI y el nuevo patrón de intensidad luminosa del CENAM", Simposio de Metrología 2018, Octubre 2018
- Héctor A. Castillo, Juan C. Molina, "Calibración de piranómetros en interiores: aseguramiento del método", Simposio de Metrología 2018, Octubre 2018
- Zeus E. Ruiz, Juan C. Bermudez, "Caracterización de jumpers de referencia en fibra óptica para la calibración de medidores de pérdidas por retorno", Simposio de Metrología 2018, Octubre 2018
- Armando J. Garcia, Juan M. Ortiz, Ismael Torres, "Metrological model of attenuation coefficient of plastic optical fiber", Simposio de Metrología 2018, Octubre 2018
- Laura P. Gonzalez, Javier Mora, "Evaluación de lámparas LED comerciales y contraste con sus especificaciones", Simposio de Metrología 2018, Octubre 2018
- Noe Vidal, Carlos H. Matamoros, "Desarrollo de una fuente óptica compuesta (UV, VIS-IR) basada en dispositivos de estado sólido para caracterización de espectrómetros de arreglo", Simposio de Metrología 2018, Octubre 2018
- Anayansi Estrada, Carlos H. Matamoros, Rosario González, "Evaluación radiométrica de un arreglo LED como candidatos a patrón de referencia", Simposio de Metrología 2018, Octubre 2018
- Malcom G. White, Zeus E. Ruiz, I. Vayshernker, N. A. Tomlin, C. Yung, M. S. Stephens, John, H. Lehman, "Cryogenic primary standard for optical fiber power measurement", Simposio de Metrología 2018, Octubre 2018
- Cryogenic primary standard for optical fibre power, M G White, Z E Ruiz, C S Yung, I Vayshenker, N A Tomlin, M S Stephens and J H Lehman, 2018 Metrologia 55 706