Abstract Submitted
for the GEC15 Meeting of
The American Physical Society

Radiative properties of Ceramic Metal-Halide High Intensity Discharge lamps (CMH) containing additives in argon plasma YANN CRESSAULT, PHILIPPE TEULET, GEORGES ZISSIS, Toulouse, LAPLACE TEAM — The lighting represents a consumption of about 19% of the world electricity production. We are thus searching new effective and environment-friendlier light sources. The Ceramic Metal-Halide High Intensity Lamps (CMH) are one of the options for illuminating very high area. The new CMH lamps are mercury free and contain additives species which lead to a richer spectrum in specific spectral intervals, a better colour temperature or colour rendering index. This work is particularly focused on the power radiated by these lamps, estimated using the Net Emission Coefficient, and depending on several additives (calcium, sodium, tungsten, dysprosium, thallium or strontium).

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Date submitted: 18 Jun 2015 Electronic form version 1.4