

A STUDY OF THE COLOR SENSITIVENESS
OF VARIOUS TYPES OF PHOTO-ELECTRIC CELLS

SUBMITTED TO THE FACULTY OF
THE RENSSELAER POLYTECHNIC INSTITUTE
IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR
THE DEGREE OF DOCTOR OF ENGINEERING

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JUNE 1928

ABSTRACT

Color sensitiveness curves were made for sodium, potassium hydride, and thin film rubidium and caesium cells. The thin film cells were prepared in the General Electric Research Laboratory by a process developed there. After finding that the caesium cells were the only ones having an appreciable sensitiveness throughout the visible spectrum, a half dozen thin film caesium on oxidized silver cells were selected at random from the stock of the G. E. Research Laboratory. These were tested for uniformity of color characteristic. This feature was of interest because any application of these cells to photometry, or color matching, would probably require replacement of cells with close duplication of color sensitiveness.

The next point of interest in connection with caesium cells, which afforded an opportunity for study, was the effect of the underlying metal on the color sensitiveness. Studies of caesium on oxidized silver and copper, were made for both spherical bulb, and plate type cells. Caesium on gold was also studied.

The section entitled, "Summary and Conclusions", should be read in connection with this section, in order to complete the abstract.