Readings Above 100 Footcandles

By clipping the metal plate, which has been provided, over the light-sensitive cell of the meter and multiplying the footcandles on the scale by 10, approximate readings up to 1000 footcandles may be taken. When not being used the plate can be clipped to the bottom of the meter. Two sets of arrows are provided on the cell. These arrows also represent multiplying factors. By covering the left portion of the cell up to the first set of arrows, the multiplying factor is 3; covered to the second set, it is 10.

Making Zero Adjustment

The zero setting should be checked occasionally. To do this, cover light-sensitive cell with opaque object, as illustrated, and check pointer position. If pointer is not on zero, take a pencil and move lug on back of meter until pointer covers zero.

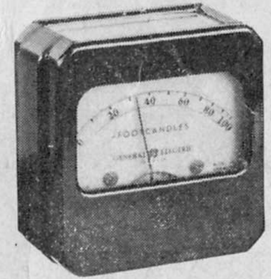
Care

The Light Meter consists of a light-sensitive cell directly connected to a small microammeter. So far as is known the life of the cell is indefinite with normal use. Although the cell is not easily damaged, it should not be exposed to bright sunlight for any appreciable length of time. The cell cover glass should be kept clean. It must be remembered that the ammeter in this instrument has to be sufficiently sensitive to move the pointer under a millionth of an ampere of current. Although as ruggedly made as possible, it should not be subjected to sudden jolts or blows.

Calibration

The Light Meter leaves the manufacturer with all its elements in the best condition, but like other electrical instruments, it will need adjustment and calibration from time to time. Zero adjustment can be made by following the instructions given in the folder. Calibration will be made by the General Electric Company at a nominal service charge. Instruments returned for calibration should be addressed to the Nela Park Engineering Division of the General Electric Company, Cleveland 12, Ohio.

INSTRUCTIONS
For Using



GENERAL LIGHT ELECTRIC METER

Reading Footcandles on

Horizontal Plane

Vertical Plane

Reading Footcandles on

Oblique Plane

Reading Reflection Factor of Wall Surface

The surface to be measured should not be less than 12 inches in either dimension. Hold the cell of the Light Meter against the surface to be measured and then draw it back slowly, as illustrated, until the needle assumes a point where further backward movement makes little appreciable change in the reading. It will probably be found that within a range of perhaps 2 to 4 inches from the surface, no change in the Light Meter reading will be noted. Turn the meter around and hold the bottom in contact with the wall and take another reading. The approximate reflection factor is then obtained by dividing the first reading by the second one.

Checking Glass Transmission

Place glass over light-sensitive cell, as illustrated, and take a footcandle reading. Remove sample and take another reading. If the meter reads 20 footcandles with the cell covered and 50 footcandles with the sample removed, that glass would have a transmission factor of approximately 40%.