As an example, let us take the following comparison: In order to sufficiently irradiate ten letters each 2 yards high, we only need ten lights each with 300 watt lamps. The current used is 10 times 300 watt per hour, that is 3000 watt, or 3 kilowatt. Ten illuminated letters made of electric bulbs two yards high need each 48 lamps of 25 watt apiece—that is, 480 lamps at 25 watt apiece, 120 000 watt = 12 kilowatt. There is also to be considered that even the smallest percentage of defective bulbs in this total of 480 means a diminishment of the entire effect.

The following comparison shows the current used by a plant with neon light contrasted with one lit by electric bulbs: ten neon letters half a yard high need in all 600 watt—that is, six-tenths of a kilowatt. Ten letters made of electric bulbs, each half-a-yard high, need 120 times 25 watt, that is 3000 watt or 3 kilowatt. The comparison is still favorable to neon even when on account of direct current the loss in the transformer must be considered. It amounts to about 32 per cent.

Since one must reckon with 1500 hours of illumination annually, it will be necessary, in addition to the much higher cost of electric current, to replace all the bulbs by new ones in the course of this time. The average life of an electric bulb is about 1000 hours of combustion. We see that even in a small plant such as that under consideration, the difference between neon and electric bulbs amounts to something quite considerable in the course of a year.

The price of the entire plant with electric bulb lettering would be 700 marks,—for the entire plant with neon, 950 marks. These prices are reckoned without the local costs of bringing up the current.

Kolonial-Ausstellung, Paris (Flutlicht und Scheinwerfer)

Colonial Exhibition, Paris (Flood lighting and Searchlights)