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Measuring

We'll conclude our discussion of electronics with "measuring light."
Here we will discuss a somewhat different specialty of Ushio's than those mentioned previously, all of which involve putting light to work in one form or another.



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When you change the wavelength

For example, consider the infrared light used to treat skin conditions, which has a wavelength of 308 nm. Increasing the wavelength might result in side effects that cause the patient to suffer. Making the intensity too great might harm the skin, but making it too low might delay treatment. The same applies to manufacture of semiconductors and LCD panels, to printing and cultivation of plants, and a variety of other fields. As uses of light's energy proliferate, so do the variety of functions and applications available from specific wavelengths. Consequently, differences in wavelength and intensity--the "quality" of light-- have become important variables in the cost of manufacture and the quality of manufactured products.

Ushio's "light ruler"

During the 1970s, semiconductors were sometimes referred to as the "bread and butter" of Japanese industry. Ushio originally developed its illuminance meters for use in controlling ultraviolet exposure during semiconductor manufacturing. As the market for illuminance meters expanded along with that for lamps, they became the de facto standard in the field of light measurement. But times change, and in certain sectors of industry, LEDs are starting to replace lamps as light sources. The problem is, there are still great variations in the light produced by LEDs used by industry. In consequence, there has been a growing demand in the market for means of accurately measuring light from a variety of light sources.

Heeding this call, Ushio has become the industry leader in the development of relevant standards. Responding to client requests, it has established a traceability system for calibration to assure absolute values together with ongoing maintenance management.

We have entered an age in which the illuminance meter has become a guide to light. Ushio's development of "rulers for light" are ongoing, and we will continue as the leader in this market.



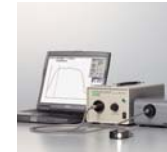
Compact UV intensity meter
UIT-6365



UV integrating photometer/
UV intensity meter
UIT Series



Spectral emission
intensity meter
USR Series



Spectral reflectance meter
URE Series

"Measuring light" Various Examples

