

## **Laboratory and in-situ tests of the UV radiation measurer for simultaneous measurements of irradiance in biologically active spectral range**

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The operational model of the UV radiation measurer is developed and made in order to increase immediacy of objects irradiance measurements in biologically active spectral range UV-A (315 – 400 nm), UV-B (280 – 315 nm), UV-C (200 – 280 nm) and in integral UV range (200 – 400 nm, below UV-D). The UV radiation measurer is designed for UV radiation remote measurements in medicine, science, protection of labour services, ecology, and agriculture. Experiment research of the device developed is executed. The calibration curve is derived. The UV radiation measurer trials with the use of standard measuring instruments is carried out. Energy irradiance produced by natural and artificial sources of UV radiation is detected. Percentage deviation of the UV radiation measurer readings from standard instruments is estimated. The possibility of the UV radiation measurer use for carrying out simultaneous and reliable measurements of irradiance in UV-A, UV-B, UV-C, and integral UV-D range of spectrum is verified.