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## Spectrophotometer based on light-emitting diode(LED) for DOBI measurement for crude palm oil quality control

Modern analysis for absorbed of organic chemistry is very popular both in industrial laboratories. In general use a UV-VIS spectrophotometer, which a light source for gas. Each wavelength can be measured with high precision but UV-VIS spectrophotometer dispersing Devices system complex light. To import from abroad the country and most expensive because of advances in the development of a LED light source. The wavelength of light depends on the optical semiconductor material wavelength from UV (ultraviolet) to IR (infrared). A research study will compare the ratio absorption of light at a wavelength at 269 nm of palm oil. When using Full Width value light at Half Maximum (FWHM) is different from a UV-VIS spectrophotometer has a value of 2 nm FWHM and light from LED at 40 nm FWHM values. A difference in absorption is associated with functions of palm oil for Interactions between light and function.

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