

ABSTRACT

Light curing is a medical device used to strengthen dental fillings. Light curing produces visible light with a wavelength of 460-485 nm. Light Cure type is the light cure unit of the light emitting diode (LED). This research was conducted to add intensity to the light cure to facilitate the process of dentist work where the composite resin hardening without requiring a long time. There are two tests, the first test uses a timer function with a stopwatch comparator.

The workings of this tool are very simple, namely by illuminating the composite which is used to patch the cavities with the intensity needed so as to maximize fillings of cavities. This module has been compared with radiometry which has been calibrated in BPFK Surabaya, and the biggest error is obtained is 2.1% and the smallest is 0.35%.

The results obtained from this study indicate that the hardness of the solre-x type composite will begin to harden if the intensity setting used is low with a setting of 40 seconds.

Keywords: Light Cure, Composite