

ABSTRACT

In order to fulfill the quality assurance requirements of the test results, 6 (six) Health Facility Testing Institutions have carried out proficiency tests in accordance with what is written in the Regulation of the Minister of Health (PERMENKES) of the Republic of Indonesia Number 54 of 2015. This proficiency test is conducted using protocols and work instructions that have been provided by the proficiency test organizer for the scope of Mobile General Radiography. The 6 (six) test parameters adopted for this test are derived from routine test parameters for the suitability test of mobile general radiography aircraft. The air kerma accuracy parameter represents linearity testing, the reproducibility parameter is adapted to the voltage accuracy, air kerma accuracy and time accuracy parameters, and the HVL accuracy, beam collimation and illumination light strength parameters are specified in the UP artifact testing work instruction. The participants' data were evaluated using the En-Score method in accordance with the provisions of the National Accreditation Agency (KAN). The results categorized as "acceptable" for illumination parameters were 83%, X-axis collimation was 67%, Y-axis collimation was 100%, 50 kV variation voltage accuracy was 100%, 70 kV variation voltage accuracy was 100%, 80 kV variation voltage accuracy was 100%, 100 kV variation voltage accuracy was 83%, 5 mAs time accuracy is 100%, 10 mAs time accuracy is 100%, 20 mAs time accuracy is 83%, 5 mAs variation air kerma accuracy is 100%, 10 mAs variation air kerma accuracy is 100%, 20 mAs variation air kerma accuracy is 100%, 60 kV variation HVL is 100%, 70 kV variation HVL is 100%, and 80 kV variation HVL is 100%. The factor that most influences the En value of more than 1 from the results of this evaluation is the inaccuracy of participants in applying work instructions and calculating uncertainty values and corrected values. Evaluation of proficiency test results is part of improving the capability of testing laboratories to ensure validation of test results.

Keywords: proficiency test, testing laboratory, mobile X-ray equipment, quality assurance