

## **DAFTAR PUSTAKA**

- [1] P. Hastuti and I. Syafitri, “Uji Kesesuaian sebagai Aspek Penting Dalam Pengawasan Penggunaan Pesawat Sinar-X di Fasilitas Radiologi Diagnostik,” *Semin. Nas. Sains dan Teknol. Nukl.*, pp. 269–277, 2009.
- [2] BAPETEN, “Peraturan Kepala Badan Pengawas Tenaga Nuklir Nomor 2 Tahun 2018 tentang Perubahan Atas Peraturan Badan Pengawas Tenaga Nuklir Nomor 2 Tahun 2018 Tentang Uji Kesesuaian Pesawat Sinar-X Radiologi Diagnostik Dan Intervensional,” 2018.
- [3] BAPETEN, “Perka Bapeten Nomor 2 Tahun 2018 tentang Uji Kesesuaian Pesawat Sinar-X Radiologi Diagnostik dan Intervensional,” *Nomor 2 Tahun 2018 Tentang Uji Kesesuaian Pesawat Sinar-X Radiol. Diagnostik danInterv.*, 2018.
- [4] U. Nations and E. Programme, *Radiation Effects and Sources*. 2016.
- [5] “JurnalPengujianSistemKolimatorApril2017.pdf.” .

- [6] B. J. J. Abdullah and K. H. Ng, “In the eyes of the beholder: What we see isnot what we get,” *Br. J. Radiol.*, vol. 74, no. 884, pp. 675–676, 2001, doi: 10.1259/bjrad.74.884.740675.
- [7] L. R. Bridge and J. E. Ison, “Technical note: A survey of the illumination from diagnostic X-ray light-beam diaphragm systems,” *Br. J. Radiol.*, vol. 68, no. 807, pp. 311–313, 1995, doi: 10.1259/0007-1285-68-807-311.
- [8] C. C. Nzotta and C. Anyanwu, “Light Beam Diaphragm as a Quality Control Parameter in Radiology,” no. July 2010, pp. 85–87, 2010, doi: 10.13140/RG.2.2.12844.10880.
- [9] M. Begum, “Quality control tests in some diagnostic X-ray units in Bangladesh Quality Control Tests In Some Diagnostic X- Ray Units In Bangladesh,” no. January, 2011.
- [10] A. S. Moi *et al.*, “Assessment of Collimation on Adult Plain Chest Radiographs as a Radiation Protection Measure in a Nigerian Teaching Hospital . Assessment of Collimation on Adult Plain Chest Radiographs asa Radiation Protection Measure in a Nigerian Teaching Hospital .,” no. June, pp. 1–6,

2017.

- [11] D. I. Jwanbot, E. E. Ike, U. A. I. Sirisena, and I. A. Joseph, “Assessment of Beam Alignment , Collimation and Half Value Layer of Some Selected X- Ray Machines in Plateau State , Nigeria,” vol. 5, no. 4, pp. 1–5, 2017.
- [12] A.-J. A. Kareem, S. N. C. W. M. P. S. K. Hulugalle, and H. K. Al-hamadani,“A Quality Control Test for General X-Ray Machine,” *Wsn*, vol. 90, no. November, pp. 11–30, 2017.
- [13] J. Ahmad and R. Yousuf, “Light Dependent Resistor (LDR) Based Low Cost Light Intensity Measurement Circuit Design (LUX Meter),” *Int. J. Innov. Res. Comput. Commun. Eng. (An ISO Certif. Organ.*, vol. 3297, no. 6, pp. 11449–11455, 2016, doi: 10.15680/IJIRCCE.2016.
- [14] M. I. Titi Andriani, Muhammad Hidayatullah, “Jurnal Ilmu Fisika,” vol. 10,no. 2, pp. 103–112, 2018.
- [15] I. M. S. Wibawa and I. K. Putra, “Perancangan Dan Pembuatan Lux Meter Digital Berbasis Sensor Cahaya El7900,” *J. Ilmu Komput.*, vol. 11, no. 1, p.

- 45, 2018, doi: 10.24843/jik.2018.v11.i01.p06.
- [16] N. Komang, T. Suandayani, G. Ngurah, and I. G. Antha, “Quality Control ofX-rays with Collimator and the Beam Alignment Test Tool,” vol. 4, no. 3, pp. 7–15, 2020.
  - [17] S. Sumriddetchkajorn and A. Somboonkaew, “Low-cost cell-phone-based digital lux meter,” *Adv. Sens. Syst. Appl. IV*, vol. 7853, p. 78530L, 2010, doi: 10.1117/12.870176.
  - [18] A. H. Ismail, M. S. M. Azmi, M. A. Hashim, M. N. Ayob, M. S. M. Hashim, and H. B. Hassrizal, “Development of a webcam based lux meter,” *IEEE Symp. Comput. Informatics, Isc. 2013*, pp. 70–74, 2013, doi: 10.1109/ISCI.2013.6612378.
  - [19] T. K. Hariadi, A. K. H. Juwito, and A. N. N. Chamim, “Smartphone-based lux meter with decision support system,” *Proc. - 7th IEEE Int. Conf. Control Syst. Comput. Eng. ICCSCE 2017*, vol. 2017-Novem, no. November, pp. 216–219, 2018, doi: 10.1109/ICCSCE.2017.8284407.
  - [20] D. Hotromasari, “Pengujian Iluminasi , Kolimasi , Ketegaklurusan danKualitas Berkas Pesawat Sinar-X Radiografi Umum dengan Radiografi Mobile,”

2018.

- [21] S. Chadidjah, “Penentuan Ketepatan Titik Pusat Berkas Sinar Pada Pesawat Mobile X-Ray Sebagai Parameter Kualitas Kontrol di RSUD. Prof. Dr. H. M. Anwar Makkatutu Bantaeng,” 2012.
- [22] J. D. Bronzino, “Medical Device and Systems,” in *The Biomedical Engineering 3th Edition*, vol. 3, pp. 1–149.
- [23] Universitas Sumatera Utara, “Bagian Bagian Pesawat Sinar-X.”  
<http://repository.usu.ac.id/bitstream/handle/123456789/53813/ChapterII.pdf?sequence=3&isAllowed=y>.
- [24] D. M. Susilo, “Uji Kolimator Pada Pesawat Sinar-X Merk/ Type Mednif/Sf- 100By Di Laboratorium Fisika Medik Menggunakan Unit Rmi,” *J. MIPA*, vol. 38, no. 2, pp. 121–126, 2016.
- [25] Kementerian Kesehatan Republik Indonesia, “Keputusan Menteri Kesehatan RI. No. 1250/MENKES/SK/XII/2009 Tentang Pedoman Kendali Mutu (Quality Control) Peralatan

- Radiodiagnostik,” vol. 27, no. 7. pp. 1–68, 2009.
- [26] A. Gunadhi, “Perancangan dan Implementasi Alat Ukur Cahaya Sederhana,” *Kommit*, 2002.
- [27] Supertechx-ray.com, “Collimator/Beam Alignment Test Tool,” 2021. <https://www.supertechx-ray.com/QualityControlPhantoms/07-661-7662.php>.
- [28] A. Pasinringi, “Pengujian Kesesuaian Antara Lapangan Penyinaran Kolimator Dengan Berkas Radiasi Yang Dihasilkan Pada Pesawat Sinar-X Mobile Di Rumah Sakit Umum Daerah Tani Dan Nelayan Gorontalo,” 2012.
- [29] Power Electronic Laboratory, *Pengukuran Intensitas Cahaya*.
- [30] Handson Technology, “HC-SR04 Ultrasonic Sensor Module User Guide : Ultrasonic Sensor V1 . 0,” pp. 1–9.
- [31] A. G. Tobelbaderstrasse, “Light-To-Digital Converter TSL2561,” vol. 43, no. 0, pp. 0–30, 2009.
- [32] Q. Hadromi *et al.*, “Sistem Pengendali Temperatur Pada Panel Surya Menggunakan Media Penyemprotan Air Otomatis,” vol. 1, no. 2, pp. 630–

634, 2015.

- [33] B. I. Sram, I. Programming, O. B. Program, M. Slave, and S. P. I. Serial, “Microcontroller with 32K Bytes Programmable Flash Automotive ATmega 328P Datasheet.”