

WAC 246-225-090 Radiographic systems other than fluoroscopic and dental intraoral—Exposure reproducibility. The exposure produced shall be reproducible to within the following criterion: When all technique factors are held constant, the coefficient of variation shall not exceed 0.05.

(1) For manual exposure control mode, this shall be deemed to have been met if when four exposures at identical technique factors are made, the difference between the maximum exposure value (E_{max}) and the minimum exposure value (E_{min}) shall be less than or equal to 10% of the average exposure (E):

$$(E_{max}) - (E_{min}) \leq 0.10E$$

(2) For phototimed exposure control mode, this shall be deemed to have been met if when four exposures at identical technique factors are made, the difference between the maximum exposure value (E_{max}) and the minimum exposure value (E_{min}) shall be less than or equal to 10% of the average exposure (E):

$$(E_{max}) - (E_{min}) \leq 0.1E$$

The four exposures are to be made under the following conditions in phototimed mode:

- (a) The kV is held constant.
 - (b) The mA, if selectable, is held constant.
 - (c) The selected density, if selectable, is held constant.
 - (d) Selection of phototimer radiation detectors (single or multiple detectors selected), if available, is varied for each of the four exposures.
 - (e) The same attenuator is placed in the X-ray field between the selected phototimer radiation detectors (photocells) and the radiation detector used to determine the four exposure values.
 - (f) The selected phototimer radiation detectors (photocells) are within the X-ray field during each exposure measurement and are covered completely by the attenuator.
- (3) Systems employing deliberately mismatched phototimed cells are permitted, providing written specifications for the mismatch are available for inspection.

[Statutory Authority: RCW 70.98.050 and 70.98.080. WSR 91-15-083 (Order 183), § 246-225-090, filed 7/23/91, effective 8/23/91. Statutory Authority: RCW 43.70.040. WSR 91-02-049 (Order 121), recodified as § 246-225-090, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.98.080. WSR 83-19-050 (Order 2026), § 402-28-054, filed 9/16/83. Statutory Authority: RCW 70.98.050. WSR 81-01-011 (Order 1570), § 402-28-054, filed 12/8/80; Order 1084, § 402-28-054, filed 1/14/76. Formerly WAC 402-28-050 (part).]