**Section 360.TABLE B Half-Value Layer as a Function of Tube Potential**

|  |  |  |  |
| --- | --- | --- | --- |
|  | X-ray Tube Voltage (kilovolt peak) | Minimum HVL (mm of Al)1 | |
|  | | | |
| Designed operating range | Measured Operating Potential | Specified Dental Systems2 | Other X-Ray Systems3 |
|  | | | |
| Below 50 | 30 | 1.5 | 0.3 |
|  | 40 | 1.5 | 0.4 |
|  | 49 | 1.5 | 0.5 |
|  | | | |
| 50 to 70 | 50 | 1.5 | 1.2 |
|  | 60 | 1.5 | 1.3 |
|  | 70 | 1.5 | 1.5 |
|  | | | |
| Above 71 | 71 | 2.1 | 2.1 |
|  | 80 | 2.3 | 2.3 |
|  | 90 | 2.5 | 2.5 |
|  | 100 | 2.7 | 2.7 |
|  | 110 | 3.0 | 3.0 |
|  | 120 | 3.2 | 3.2 |
|  | 130 | 3.5 | 3.5 |
|  | 140 | 3.8 | 3.8 |
|  | 150 | 4.1 | 4.1 |

1 Linear extrapolation or interpolation may be made for an x-ray tube potential (kVp) not listed in the table above (e.g., in the column entitled "Other X-ray Systems" operated at 20 kVp and 95 kVp, the minimum HVL required would be 0.2 and 2.6 millimeters of aluminum respectively).

2 "Specified Dental Systems" means any dental x-ray system designed for use with intraoral image receptors and manufactured after December 1, 1980.

3 "Other X-Ray Systems" means all x-ray systems required to meet the provisions of Sections 360.50, 360.60, 360.75, 360.90 (except "Specified Dental Systems") and 360.100 of this Part. Half-value layer requirements for mammography systems are specified in Section 360.71(e) of this Part.

(Source: Amended at 22 Ill. Reg. 5904, effective March 13, 1998)