

FLUOROSCOPIC & SPOT IMAGING

Machine Number _____ / _____ or Tube I.D. _____

Facility Registration Number _____ - _____ or Facility Name _____

Begin Inspection ____ / ____ / ____ Inspector License No. _____
 mm dd yy

Manufacturer _____ Model _____ (Mobile? Y/N) _____

Max. kVp, mA ____ / ____ Max. Spot Film mA ____ Mfr. After 5/19/95? (Y/N) ____ C-arm (Y/N) ____

Are all the components subject to Federal Certification Standards? Y/N _____

MODE: (indicate all modes available) () THERAPY SIMULATOR, () MANUAL, () AEC,
 () HIGH LEVEL CONTROL, () CINE, () DSA, () PULSE ____Max. FPS

| <u>Regulation Number</u> | <u>Requirements for Fluoroscopic Procedures and Equipment</u> | <u>Pass (P), Fail (F) or Not Applicable (NA)</u> |
|--------------------------|--|--|
| F.5 | All Fluoroscopic systems must be image intensified. | _____ |
| F.5(c)(1)(vi) | Minimum source to skin distance? Measured ____ cm/inch | _____ |
| F.5(f)(4)(ii) | If F.5(f)(4) is true, written safety procedures are available for reference at all times. Indicate here if F.5(f)(5) is true. | _____ _____ |
| F.5(a)(1) | Primary Barrier (i) Protective barrier intercepts entire cross section of useful beam at any SID? (ii) X-rays not produced unless barrier in position to intercept entire useful beam? | _____ _____ |
| F.5(d)(1) | Exposure rate transmitted does not exceed 2 mR/hour per R/min at 10 cm? | _____ |
| F.5(a)(2)(i) | For all certified systems, neither length nor width of x-ray field exceeds that of the visible area by more than 3% of the SID. _____% Length Error ____% Width Error Combined Error ____% (pass if not greater than 4%) | _____ _____ |
| F.5(a)(2)(ii) | For uncertified systems with a spot film device, the x-ray beam shall be no larger than the largest spot film size. | _____ |
| F.5(a)(2)(iii) | For uncertified systems without a spot film device, neither length nor width of x-ray field exceeds that of the visible area by more than 3% of the SID. _____% Length Error ____% Width Error Combined Error ____% (pass if not greater than 4%) | _____ _____ |
| F.5(a)(2)(iv) | (a) For devices manufactured after 1979 incorporated into systems with variable SID or visible area >300 cm, means shall be provided to further limit field or for stepless field size adjustment. (b) For fixed SID and visible area <= 300 cm, means shall be provided for stepless adjustment or to further limit field to <= 125 cm. (c) For stepless, X-ray beam at greatest SID is <= 5 cm x 5 cm. (d) Axis of x-ray beam indicates perpendicular to plane of image receptor? | _____ _____ _____ _____ |

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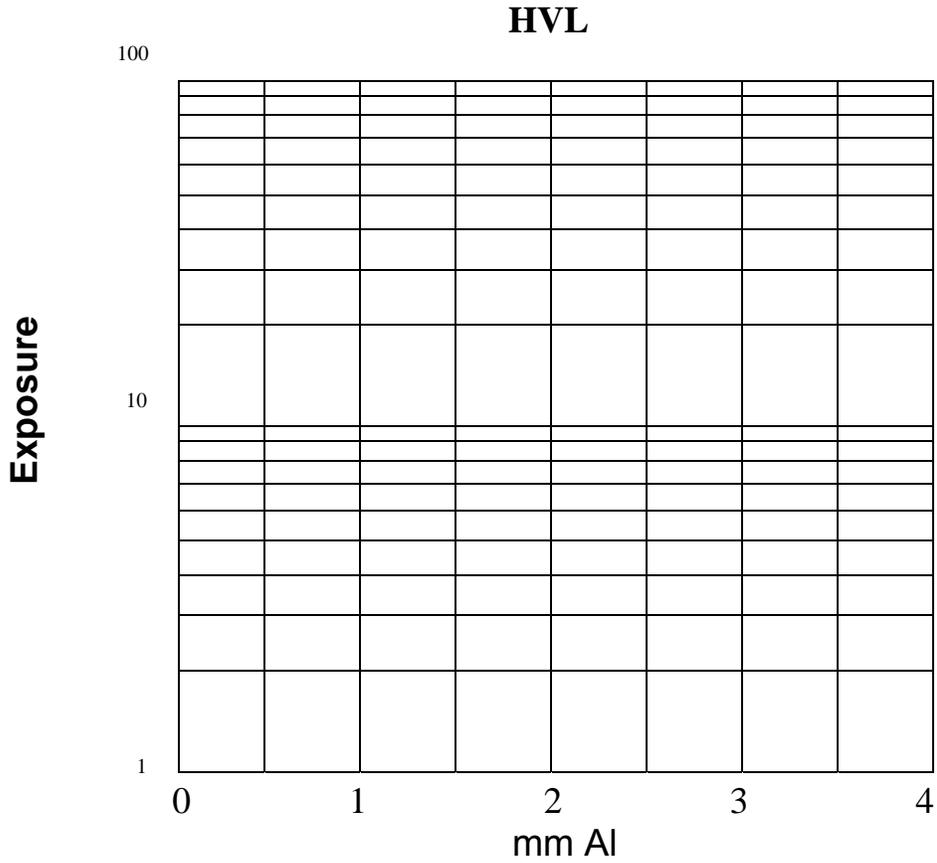
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|--|---|--|--|--|--|--|--|--|--|--|--|--|--|--|
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| F.5(a)(3) | Spot film limitation. (i) Adjustment of x-ray field between source and patient? _____ (ii) Neither length nor width of x-ray field exceeds that of the image receptor by >3% of the SID. _____ _____% Length Error _____% Width Error Combined Error _____% (pass if not greater than 4%) _____ (iii) Min. field size at greatest SID <= 5 cm x 5 cm. _____ (iv) X-ray field centered within 2% of SID. _____ (v) Axis of x-ray beam indicates perpendicular to plane of image receptor? _____ | | | | | | | | | | | | | |
| F.5(a)(4) | Override of automatic field size adjustments indicated? _____ | | | | | | | | | | | | | |
| F.5(j) | Exposure Control. F.6(b)(1) Means provided to terminate exposure within 10% of preset value? _____ F.6(b)(4) Exposure is reproducible with setting 0.5 seconds or less? _____ Set time _____sec Measured _____ sec Error _____% _____ F.6(b)(2)(i) Exposure can be terminated except for less than 0.5 sec, or serial radiography? _____ F.6(b)(2)(ii) Control mounted for compliance with stationary or mobile x-ray systems? _____ F.6(b)(2)(ii)(c) Means provided to view patient during exposures? _____ F.6(b)(2)(ii)(d) Control has visual indication whenever x-rays are produced? _____ F.6(b)(3) Automatic Exposure Controls operate properly? _____ | | | | | | | | | | | | | |
| F.5(b) | X-ray production in fluoroscopic mode is controlled by a device which requires continuous pressure? _____ | | | | | | | | | | | | | |
| Entrance Exposure Rate Limits (All measurements must be in R/min). | | | | | | | | | | | | | | |
| F.5(c)(1) | Entrance exposure rate measured where useful beam enters the patient within limits? _____ | | | | | | | | | | | | | |
| F.5(c)(1) | Systems manufactured before May 19, 1995: _____ (i) with AEC (limit = 10R/min) (i)(b) with AEC and high level control (limit = 5R/min) (ii) without AEC (limit = 5R/min) (ii)(b) without AEC, with high level control (limit = 5R/min) (iii) with AEC and manual mode (limit = 10R/min) (iii)(b) with AEC and/or manual mode, with high level control (limit = 5R/min) | | | | | | | | | | | | | |
| | <table border="1" style="width:100%; border-collapse: collapse;"> <tr> <td style="width:25%;">mA\kVp</td> <td style="width:25%;"></td> <td style="width:25%;"></td> <td style="width:25%;"></td> </tr> <tr> <td> </td> <td> </td> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </table> | mA\kVp | | | | | | | | | | | | |
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| F.5(c)(1)(v) | Systems manufactured on or after May 19, 1995: (limit of 10R/min) (b) With high level control (limit = 20R/min) | | | | | | | | | | | | | |
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| F.5(c)(1)(iv) | Have AERC if greater than 5R/min? _____ | | | | | | | | | | | | | |



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|--------------------------|---|--|
| F.5(c)(1) | Special means of activation of High Level control available. | _____ |
| F.5(c)(1) | Continuous audible signal indicates that High Level control is engaged? | _____ |
| F.5(c)(2)(ii) | Annual and required measurements of entrance exposure rate completed and posted? Annual and required measurements of maximum entrance exposure rate completed and posted? | _____ _____ |
| F.5(e) | Tube potential (kVp) and current (mA) indicated continuously during fluoroscopy and cine? | _____ |
| F.5(g)(1) | Means provided to preset cumulative on-time, not to exceed 5 minutes without resetting? | _____ |
| F.5(g)(2) | (i) Audible signal indicates completion of preset cumulative on-time; continue to sound until reset? (ii) If no audible signal, x-rays terminate automatically? | _____ _____ |
| F.5(h) | Mobile fluoroscope provided with image intensifier? | _____ |
| F.5(i) | (1) Operator protected by at least 0.25mm lead equivalent protective apron? (3) Agency sterile field exemption? | _____ _____ |
| F.5(k) | Fluoroscopy meets requirements for exemption as a Radiation Therapy Simulation system? | _____ |
| F.5(l) | (1) Facility demonstrated initial in-house privileging of all users who energize fluoroscopic systems? (3) Facility demonstrated refresher in-house privileging? | _____ _____ |
| F.5(m) | (1) Fluoroscopic systems used as a positioning tool for radiographic exams? (2) Facility demonstrated three-month in-house evaluation of fluoroscopic exposure times by procedure and licensed practitioner? | _____ _____ |
| Beam Quality | | |
| F.6(e) | kVp does not differ by more than 10% of indicated value? Set _____kVp Measured _____kVp Error _____% | _____ |
| F.4(e)(1) | Half Value Layer Required _____mm Al Measured _____mm Al kVp used _____ mA used _____ Max. kVp _____ Phototimer? _____(Y/N) Rate Mode? _____(Y/N) R/min | _____ |

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|-------------------|--|--|--|--|
| EXPOSURE MEASURED | | | | |
|-------------------|--|--|--|--|

