

SUPPLEMENT 2: CHIROPRACTIC SYSTEMS

ABOVETABLE X-RAY SOURCE RADIOGRAPHIC SYSTEMS (Test procedure ARB - Use form FDA 2784)

This supplementary procedure is used in conjunction with the abovetable x-ray source radiographic systems test procedure for testing stationary general purpose systems that employ a permanently mounted vertical cassette holder instead of a conventional table with cassette tray (e.g., chiropractic systems). The same field test record, FDA 2784, is used for recording the data. When performing this supplementary procedure, the following changes to the radiographic procedure apply:

1. Enter the letter "B" in data item 1.
2. In items 4 and 5 of the field test record, substitute the vertical cassette holder information.
3. Indicate in item 6 of the field test record the certification status of the vertical cassette holder using the "other" box, and write "vertical cassette holder" just below the box.
4. In step 3.4 of the radiographic procedure, if direct print paper is used, it may be necessary to tape the plastic cassette (containing the direct print paper) to an empty film cassette to be loaded into the holder. Be sure that the plastic cassette is exactly centered on the film cassette.
5. Use the following test stand and equipment setup, and skip steps 3.5, 3.6, 3.7, and 3.8 of the radiographic procedure:
 - a) Mount the right side of the test stand onto the tripod so that the MDH holes are on top. Follow the tripod setup procedure in Appendix B of the test procedures manual.
 - b) Position the test stand and tripod assembly so that the test stand is approximately centered in the x-ray beam with the base of the stand in firm contact with the front panel of the cassette holder or the film cassette if the cassette holder does not have a front panel.
 - c) Attach the spacer assembly to the test stand positioned out of the beam.
 - d) Position the 6 cm³ chamber in hole "D" of the test stand and secure with the retaining ring.
 - e) Insert the slide assembly, grid side towards the beam-limiting device, into slot 6 of the test stand.
 - f) Insert a plastic cassette containing a sheet of direct print paper into the slide assembly.

- g) Turn on the light localizer and center the test stand by centering the light field on the slide assembly grid.
- h) If possible, move the source assembly to the minimum SID position or until the face of the beam-limiting device comes into contact with the spacer assembly. In any case, leave the test stand in firm contact with the cassette holder.
- i) Adjust the beam-limiting device so that the light field is approximately 4" x 6" at the slide assembly with the longer dimension parallel to the vertical dimension of the cassette holder. Using a piece of white paper, at the "top" of the test stand, check all edges of the light field against those of the opening in the top of the test stand to make sure that the light field is not shielded by the stand and passes through the opening in the top of the stand.

NOTE: If the SID is fixed at 72 inches, the light field will have to be reduced to an approximate 2" x 2" size at the slide assembly to ensure that the light passes through the opening in the top of the stand.

- 6. Using the method given in step 7.1 of the radiographic procedure, measure the distance from the focal spot to the base of the test stand and record this distance at item 48 of the field test record.
- 7. Follow steps 7.2, 7.3, and 7.4 and record the measured distance at item 49. Note that in step 7.4, the word "top" now becomes "front." Thus, the required distance is from the front surface of the cassette to the base of the test stand. If the test stand is already in contact with the cassette, record 00.0 at item 49.
- 8. When performing the PBL sizing test, Actual vs Indicated field size test, and the X-ray Field/Light Field Alignment and Size Comparison test (sections 8.0, 10.0, and 12.0 of the radiographic procedure) all references to "dimensions along the table" are to be dimensions in the vertical directions, and all references to "dimensions across the table" are to be dimensions in the horizontal direction.
- 9. In step 8.7 of the radiographic procedure, measure the dimensions of the light field at the front panel of the cassette holder, or the film cassette if there is no front panel. If measuring the light field at the film cassette, it may be necessary to hold a piece of paper along each edge to visualize any part of the light field that extends beyond the edge of the film cassette.
- 10. If the SID is fixed, the PBL sizing test is to be performed for two different image receptor sizes only, and data items 57, 58, 59, 65, 66, and 67 are to be left blank.
- 11. In step 10.4 of the radiographic procedure, measure the dimensions of the light field at the front panel of the cassette holder. If there is no front panel, load a film cassette of a larger size than the field size dialed on the beam-limiting device into the cassette holder, readjust the field size if necessary and measure the light field dimensions at the film cassette.
- 12. When testing for illuminance with a fixed SID of greater than 42.5 inches, it will be

necessary to use the test stand or other supporting device positioned at 42.5 inches so that the digaphot can be held against the support while making the illuminance measurements. Be careful not to cover or shade the detector element with your hand or body.