FUJI COMPUTED RADIOGRAPHY FOR MAMMOGRAPHY (FCR*m*)
MAMMOGRAPHY EQUIPMENT EVALUATION (MEE)

Initial Accreditation____ Adding New Units to Existing Accreditation____

FACILITY_____MAS_____Model_____Room_____

MEE Date _____Within 6 months? ____ PASS/FAIL? ____Signed by _____

QC Manual Version at facility_____

1) Contrast-To-Noise Ratio (CNR) (Tech weekly test)
CNR must not vary by more than ± 20% of baseline **Yes _____ No _____**

2) Image Quality Evaluation
Phantom **Yes _____ No _____**
4 largest fibers, 3 largest speck groups and 3 largest masses are visible

Phantom Image Quality scores:	**Hard Copy:** Background		Soft Copy
Fibers _____	Background OD (>1.20)	_____	S value: baseline ± 20%
Specks_____	OD ± 0.20	_____	mAs: baseline ± 15%
Masses_____	DD ± 0.05	_____	

Printer Quality Control: Follows Manufacturer Specification **Yes _____ No _____**
Monitor Quality Control: Follows Manufacturer Specification **Yes _____ No _____**

3) S Value Confirmation
Corrected S Value should not exceed the range of 120 ± 20% **Yes _____ No _____**

4) Evaluation of System Resolution **Yes _____ No _____**
Measured performance 8 + 2 lp/mm, both scan directions

5) CR Reader Scanner Performance **Yes _____ No _____**
"T" test image smooth and sharp

6) Imaging Plate Fog **Yes _____ No _____**
[is now a semi-annual Tech. test]. Coin not visible on image

7) Mammographic Unit Assembly Evaluation **Yes _____ No _____**
Follows Mammographic Unit Assembly Evaluation Form. [The list of items to be checked in the Fuji QC manual should be included as a part of or supplemented to this form].

8) Collimation Assessment **Yes _____ No _____**
Deviation between X-ray field and light field is ≤ 2% of SID
X-ray field does not extend beyond any side of the IR by more than 2% of SID and must cover all the IR on the chest wall side
Chest wall edge of compression paddle doesn't extend beyond IR by more than 1% SID or appear on image

9) AEC System Performance Assessment **Yes _____ No _____**
Measured performance within acceptable limits as stated in the applicable QC manual
Δ mAs/density step; within 5-15%, COV reprod. ≤ 0.05, CNR level for 2 & 6 cm within + 15% of the 4 cm value

10) System Artifact Evaluation **Yes _____ No _____**
Examine images for artifacts. No objectionable artifacts on image

11) Dynamic Range **Yes_____ No_____**
Measured performance within acceptable limits. Exposures with acrylic thicknesses of 0 cm, 2 cm, & 6 cm are discernible

12) Primary Erasure **Yes_____ No_____**
Measured performance within acceptable limits. No significant artifacts observed

13) Inter-Plate Consistency **Yes_____ No_____**

Variation of mAs must be within ± 10%
Variation of SNR must be within ± 15%

14) kVp Accuracy and Reproducibility **Yes _____ No _____**

Measured average kVp within ± 5% of indicated kVp
kVp reproducibility coefficient of variation ≤ 0.02

15) Breast Entrance Exposure, AEC Reproducibility and Average Glandular Dose **Yes _____ No ____**

Average Glandular Dose for average breast is ≤ 3 mGy (300 mrad) _____mrad
Coefficient of Variation for either R or mAs shall not exceed 0.05

16) Beam Quality Assessment (HVL) Measurement **Yes _____ No _____**

HVL meets minimum specifications in the applicable QC manual. HVL (mmAl) ≥ kVp/100 for Mo/Mo & Std. Breast

17) Radiation Output Rate **Yes _____ No _____**

Radiation Output Rate is ≥ 800 mR per second @28 kVp (Mo/Mo) for 3 seconds

18) Viewbox Luminance and Reading Room Conditions **Yes _____ No _____**

Mammographic viewbox is capable of a luminance of at least 3000 nit
Room illuminance (viewbox surface as seen by observer) is 50 lux or less
Room illuminance (monitor surface) is: ≤20 lux or the limit set by the monitor manufacturer (if less than 20 lux, for soft copy reading

FUJI COMPUTED RADIOGRAPHY FOR MAMMOGRAPHY (FCR*m*)
Annual Survey Report for Reaccreditation
MAMMOGRAPHY EQUIPMENT EVALUATION (MEE)

FACILITY_____MAS_____Model_____Room_____

Survey Date _____Within 6 months? ____ PASS/FAIL? ____Signed by _____

QC Manual Version at facility_____

1) Physicist's Review of QC Technologist Tests

Weekly

CNR Test	**Yes _____**	**No _____**
Phantom Image Test	**Yes _____**	**No _____**
Printer QC Test	**Yes _____**	**No _____**
Monitor QC Test	**Yes _____**	**No _____**

Monthly

Visual Checklist	**Yes _____**	**No _____**

Quarterly

Repeat Analysis	**Yes _____**	**No _____**

Semi-annually

Compression	**Yes _____**	**No _____**
IP Fog Test	**Yes _____**	**No _____**

2) Image Quality Evaluation

Phantom **Yes _____** **No _____**

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Phantom Image Quality scores:	**Hard Copy:**	**Soft Copy:**
Fibers _____	Background OD (>1.20) _____	S value: baseline + 20%
Specks_____	OD + 0.20 _____	mAs: baseline + 15%
Masses_____	DD + 0.05 _____	

Printer Quality Control: Follows Manufacturer Specification **Yes _____** **No _____**

Monitor Quality Control: Follows Manufacturer Specification **Yes _____** **No _____**

3) S Value Confirmation

Corrected S Value should not exceed the range of 120 + 20% **Yes _____** **No _____**

4) Evaluation of System Resolution **Yes _____** **No _____**

Measured performance 8 + 2 lp/mm, both scan directions

5) CR Reader Scanner Performance **Yes _____** **No _____**

"T" test image smooth and sharp

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Follows Mammographic Unit Assembly Evaluation Form. [The list of items to be checked in the Fuji QC manual should be included as a part of or supplemented to this form].

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