COLLEGE OF PHYSICIANS AND SURGEONS OF BRITISH COLUMBIA

Diagnostic Accreditation Program

ACCREDITATION STANDARDS

Displays

Diagnostic Accreditation Program
College of Physicians and Surgeons of British Columbia
300–669 Howe Street
Vancouver BC V6C 0B4

Introduction

Display types

If the display is multipurpose (e.g. modality and clinical specialist) the higher DAP standard is applied.

Term	Definition
diagnostic displays	Diagnostic displays refer to all displays used for the primary interpretation of radiography, fluoroscopy, computed tomography, magnetic resonance, ultrasound, echocardiography, and nuclear medicine imaging.
mammography displays	Mammography displays refer to all displays used for the primary interpretation of mammography imaging.
modality displays	Modality displays refer to a designated display(s) utilized by technologists to make image quality decisions (e.g. repeat imaging prior to patient discharge), create image reconstructions, and perform advanced post processing. **Depending on the medical imaging system a display which meets the DAP modality display criteria may or may not be located at the acquisition console. If the acquisition console display does not meet DAP modality display criteria, then another readily accessible display can be designated as the modality display.** Only displays which are designated as modality displays must be maintained and reviewed as part of DAP accreditation. Not all displays utilized by technologists are modality displays. Displays which are only used to verify that images have successfully migrated to PACS are not considered modality displays, unless it is also used to make image quality decisions, create image reconstructions, and or perform advanced post processing. Displays used solely for navigation of the modality interface or a PACS/RIS interface are not considered modality displays. Displays which are only utilized for internet browsing are not considered modality displays. A modality, clinical specialist or primary display is utilized for routine auditing of technologist image quality and positioning (e.g. monthly image review) to ensure patient motion can easily be observed. It is recommended that all modality displays are identifiable to technologists (e.g. printed label, display naming convention, etc.).

Term	Definition
interventional displays	Interventional displays refer to all displays used for guidance, navigation or reference during the performance of interventional procedures. Interventional displays may be a separate display or located at the acquisition console. The DAP interventional display standards align closely with the performance criteria of modality displays. The American Association of Physicists in Medicine (AAPM) recommends that displays used for interventional procedure guidance should have the same performance criteria as diagnostic displays, which is a higher standard. As the immediate implementation of diagnostic quality displays in all interventional procedure environments is a significant budgetary concern, health care providers using displays which conform to DAP interventional display standards should understand the display limitations when making a medical diagnosis or patient care decision.
clinical specialist displays	Clinical specialist displays refers to all secondary displays which physicians review patient images for the purpose of making a healthcare management decision, excluding primary interpretation. The DAP clinical specialist display standards align closely with the performance criteria of modality displays. The American Association of Physicists in Medicine (AAPM) recommends that clinical specialist displays should have the same performance criteria as diagnostic displays, which is a higher standard. As the immediate implementation of diagnostic quality displays in all physician patient image review environments is a significant budgetary concern, health care providers using displays which conform to DAP clinical specialist display standards should understand the display limitations when making a medical diagnosis or patient care decision. For the purposes of the DAP, clinical specialist displays which are in the medical imaging department or managed by medical imaging are only considered.
home reporting and teleradiology displays	Home reporting/teleradiology displays must conform to the diagnostic or mammography display standards, as applicable for the services provided.
bone densitometry displays	Bone densitometry displays are not considered primary displays, as the output of bone densitometry examinations is a measurement, not a medical image for interpretation.

Term	Definition
glossy displays	Glossy displays refers to a primary display with a high reflection coefficient (R_d). A relatively small absolute change in actual or estimated reflection coefficients results in a large change in required display performance. It is recommended that before purchasing a diagnostic or mammography display, a review of the display's R_d is conducted.

Display quality assurance

Term	Definition
quantitative	In terms of quality control testing of displays, a quantitative evaluation of displays is undertaken by obtaining a measurement.
qualitative	In terms of quality control testing of displays, a qualitative evaluation of displays is undertaken by obtaining an observation.
illuminance	Illuminance is the quantity of light that is incident on the display, which is measured in lux.
luminance (L)	Luminance (L) refers to the intensity of visible light emitted from a display, which is measured in candela per square meter (cd/m^2).
ambient luminance (L_{amb})	Ambient luminance (L_{amb}) is the component of display luminance due to the diffuse reflection of room light incident on the display surface.
ambient light	Ambient light refers to sources of visible light, other than the display itself, that reflects off the surface of the display.
luminance response function	Luminance response function refers to the changes in a display's luminance as image gray levels vary.

Term	Definition
specular reflection	Specular reflection refers to light reflected from a surface at a definite angle. Smoother surfaces generally produce more specular reflection, giving them a reflective property like a mirror. It is recommended to avoid the use of glossy panels with high specular reflectance, especially for use in environments with high levels of ambient light.
diffuse reflection	Diffuse reflection refers to incident light scattered in many directions, which creates a more uniform increase in reflected light.
minimum luminance	Minimum luminance (L_{min}) describes the luminance that a display will output when an image with the minimum pixel value is displayed (i.e. darkest of grey levels).
total minimum luminance (L'_{min})	Total minimum luminance (L'_{min}) = minimum luminance emitted (L_{min}) + ambient luminance (L_{amb})
maximum luminance	Maximum luminance describes the luminance that a display will output when an image with the maximum pixel value is displayed (i.e. lightest of grey levels).
total maximum luminance (L'_{max})	Total maximum luminance (L'_{max}) = maximum luminance emitted (L_{max}) + ambient luminance (L_{amb})
luminance ratio (LR)	Luminance ratio (LR) refers to how much contrast will be visible when viewing an image across all grey levels. To calculate LR you divide the total maximum luminance (L'_{max}) by the total minimum luminance (L'_{min}) (i.e. $LR=L'_{max}/ L'_{min}$).
technical capability display luminance	Technical capability display luminance refers to the intrinsic technical luminance capabilities of a display (i.e. 0.05 cd/m^2 to 1,000 cd/m^2). The technical capabilities of newer displays may be excessive (e.g. too bright) for typical reading environments to have an appropriate luminance ratio and a luminance range which aligns with the human visual system. These displays should be calibrated to an appropriate operating/calibrated luminance.

Term	Definition
operating/calibrated display luminance	Operating/calibrated display luminance refers to the operating luminance range with is set by calibrating the L_{max} and when possible $L_{min.}$ (i.e. 0.8 cd/m^2 to 420 cd/m^2) to be a more appropriate range for interpretation. It is important to calibrate the luminance range to ensure an ideal contrast (luminance ratio) can be achieved and that the L_{min} and L_{max} values are within the human visual system (HVS).

Diagnostic display – primary display

No.		Description	Risk	Reference	Change
					New
DISP1.0		**DIAGNOSTIC DISPLAY – PRIMARY DISPLAY** *Guidance: Diagnostic displays refer to displays used for primary interpretation of radiography, fluoroscopy, computed tomography, magnetic resonance, ultrasound, echocardiography, and nuclear medicine imaging. For diagnostic displays used for the interpretation of mammography imaging, see DISP2.0 for requirements.*			
DISP1.1		**Diagnostic displays have appropriate technical specifications.**			New
DISP1.1.1	**M**	Diagnostic displays have a graphic bit depth of 8-bits or greater. *Guidance: BIT depth is the number of bits used to define each pixel. The greater the bit depth, the larger greyscale can be displayed.*	H	ACR-AAPM-SIIM-TS.Electronic.MI	New
DISP1.1.2	**M**	Diagnostic displays are LED backlight, in-plane switching (IPS), liquid crystal displays (LCDs).	H	ACR-AAPM-SIIM-TS.Electronic.MI	New
DISP1.1.3	**B**	Diagnostic displays have an integrated photometer. *Guidance: Photometer is a device used to measure photometric quantities of visible light, such as luminance and illuminance.*		ACR-AAPM-SIIM-TS.Electronic.MI	New
DISP1.1.4	**M**	Diagnostic displays have a resolution of 3 MP or greater.	H	ACR-AAPM-SIIM-TS.Electronic.MI	New
DISP1.1.5	**B**	Diagnostic displays have an approximate pixel pitch of 0.200 mm, and not greater than 0.215 mm. *Guidance: Pixel pitch is suitable to present all spatial frequencies perceivable by the human visual system and at a typical viewing distance an observer can see smooth tones and well-defined edges.*		ACR-AAPM-SIIM-TS.Electronic.MI	New
DISP1.1.6	**B**	Diagnostic displays are set to a consistent white point. *Guidance: At minimum paired diagnostic displays at a workstation are set to a consistent white point (e.g. $\Delta_{D65}(u', v') <= 0.01$). It is recommended that there is a consistent white point set for all facility diagnostic displays.*		ACR-AAPM-SIIM-TS.Electronic.MI	New

No.		Description	Risk	Reference	Change
DISP1.1.7	**B**	Dynamic contrast ratio (DCR) features are disabled for diagnostic displays. *Guidance: If diagnostic displays have a feature where ambient light is detected and that automatically adjusts the luminance response of the display, this is disabled.*		II-DISP-PACS-AC-24	New
DISP1.2		**Acceptance testing is performed after purchase and prior to clinical use of diagnostic displays.** *Guidance: Acceptance testing of diagnostic displays is performed in the intended physical environment (i.e. reading room) under typical reading conditions, as applicable.*			New
DISP1.2.1	**M**	Acceptance testing of diagnostic displays includes a quantitative evaluation of the maximum luminance L'_{max} (including ambient luminance) under typical reading conditions. *Guidance: L'_{max} is 250 cd/m^{2}or greater. It is recommended that L'_{max} is 350 cd/m^2 or greater. The technical capability of the display may have a luminance maximum of much higher than 350 cd/m^2, but the human visual system is limited, hence displays should be calibrated to ensure luminance maximums are not too high. The operating/calibrated luminance maximum and luminance minimum (including ambient luminance) are appropriate to ensure a luminance ratio of 250 to 450 is achieved.*	H	II-DISP-PACS-AC-24	New
DISP1.2.2	**M**	Acceptance testing of diagnostic displays includes a quantitative evaluation of the minimum luminance L'_{min} (including ambient luminance) under typical reading conditions. *Guidance: L'_{min} is 1.0 cd/m^2 or greater. The technical capability of the display may have a luminance minimum of much less, but the human visual system is very poor in the very darkest of grey values, hence displays should be calibrated to ensure luminance minimums are not too low. The operating/calibrated luminance maximum and luminance minimum (including ambient luminance) are appropriate to ensure a luminance ratio of 250 to 450 is achieved.*	H	II-DISP-PACS-AC-24	New
DISP1.2.3	**M**	Acceptance testing of diagnostic displays includes a quantitative evaluation of the luminance ratio (including ambient luminance) under typical reading conditions. *Guidance: Luminance ratio is 250 to 450. LR = L'max/L'min.*	H	AAPM-270	New

No.		Description	Risk	Reference	Change
DISP1.2.4	**M**	Acceptance testing of diagnostic displays includes a quantitative evaluation of luminance response. *Guidance: Luminance response is within 15% of the DICOM GSDF.*	H	II-DISP-PACS-AC-24	New
DISP1.2.5	**M**	Acceptance testing of diagnostic displays includes a quantitative evaluation of ambient luminance and illuminance. *Guidance: It is recommended that the ambient ratio, L_{amb}/L_{min}, is ¼ or less under typical conditions and ambient illuminance is maintained at 25–75 lux.*	H	AAPM-270	New
DISP1.2.6	**B**	Acceptance testing of diagnostic displays includes a quantitative evaluation of luminance uniformity.		AAPM-270	New
DISP1.2.7	**B**	Acceptance testing of diagnostic displays includes a qualitative evaluation of noise. *Guidance: Noise effects do not impact clinical use.*		AAPM-270	New
DISP1.2.8	**B**	Acceptance testing of diagnostic displays includes a qualitative evaluation of spatial resolution. *Guidance: Pixel structure not visible under typical conditions.*		AAPM-270	New
DISP1.2.9	**B**	Acceptance testing of diagnostic displays includes a qualitative evaluation of temporal resolution. *Guidance: Temporal effects do not impact clinical use.*		AAPM-270	New
DISP1.3		**Daily quality control testing procedures are established and used to monitor performance of diagnostic displays.**			New
DISP1.3.1	**M**	Daily quality control testing of diagnostic displays includes an overall visual evaluation of image quality and presence of artifacts.	M	SC-35	New
DISP1.4		**Quarterly control testing procedures are established and used to monitor performance of diagnostic displays.**			New
DISP1.4.1	**B**	Quarterly quality control testing of diagnostic displays includes a qualitative evaluation of luminance response. *Guidance: All low-contrast features are visible under typical conditions.*		AAPM-270	New
DISP1.4.2	**B**	Quarterly quality control testing of diagnostic displays includes a qualitative evaluation of ambient luminance and illuminance. *Guidance: Low-contrast features in darkest region are visible in both no-light and normal-light settings.*		AAPM-270	New

No.		Description	Risk	Reference	Change
DISP1.4.3	**B**	Quarterly quality control testing of diagnostic displays includes a qualitative evaluation of uniformity. *Guidance: Non-uniformities do not impact clinical use.*		AAPM-270	New
DISP1.4.4	**B**	Quarterly quality control testing of diagnostic displays includes a qualitative evaluation of spatial resolution. *Guidance: Pixel structure not visible under typical conditions.*		AAPM-270	New
DISP1.5		**Annual quality control procedures are established and used to monitor performance of diagnostic displays.**			New
DISP1.5.1	**M**	Annual quality control testing of diagnostic displays includes a quantitative evaluation of the maximum luminance L'_{max} (including ambient luminance) under typical reading conditions. *Guidance: L'_{max} is 250 cd/m^2 or greater. It is recommended that L'_{max} is 350cd/m^2 or greater. The technical capability of the display may have a luminance maximum of much higher than 350cd/m^2, but the human visual system is limited, hence displays should be calibrated to ensure luminance maximums are not too high. The operating/calibrated luminance maximum and luminance minimum (including ambient luminance) are appropriate to ensure a luminance ratio of 250 to 450 is achieved. Refer to DISP5.1.2 for recommendations on ambient illuminance and luminance levels.*	M	II-DISP-PACS-AC-24	New
DISP1.5.2	**B**	Annual quality control testing of diagnostic displays includes a quantitative evaluation of the minimum luminance L'_{min} (including ambient luminance) under typical reading conditions. *Guidance: It is recommended that L'_{min} is 1.0 cd/m^2 or greater. The technical capability of the display may have a luminance minimum of much less, but the human visual system is very poor in the very darkest of grey values, hence displays should be calibrated to ensure luminance minimums are not too low. The operating/calibrated luminance maximum and luminance minimum (including ambient luminance) are appropriate to ensure a luminance ratio of 250 to 450 is achieved. Refer to DISP5.1.2 for recommendations on ambient illuminance and luminance levels.*		II-DISP-PACS-AC-24	New

No.		Description	Risk	Reference	Change
DISP1.5.3	**M**	Annual quality control testing of diagnostic displays includes a quantitative evaluation of the luminance ratio (including ambient luminance) under typical reading conditions. *Guidance: Luminance ratio is 250 to 450. LR= L'max/L'min.*	M	AAPM-270	New
DISP1.5.4	**M**	Annual quality control testing of diagnostic displays includes a quantitative evaluation of luminance response. *Guidance: Luminance response is within 15% of the DICOM GSDF.*	M	II-DISP-PACS-AC-24	New
DISP1.5.5	**B**	Annual quality control testing of diagnostic displays includes a quantitative evaluation of ambient luminance and illuminance. *Guidance: It is recommended that the ambient ratio, L_{amb}/L_{min}, is ¼ or less under typical conditions and ambient illuminance is maintained at 25 to 75 lux.*		AAPM-270	New
DISP1.5.6	**B**	Annual quality control testing of diagnostic displays includes a quantitative evaluation of luminance uniformity.		AAPM-270	New
DISP1.5.7	**B**	Annual quality control testing of diagnostic displays includes a qualitative evaluation of spatial resolution. *Guidance: Pixel structure not visible under typical conditions.*		AAPM-270	New

Mammography display – primary display

No.		Description	Risk	Reference	Change
					New
DISP2.0		**MAMMOGRAPHY DISPLAY – PRIMARY DISPLAY** *Guidance: Mammography displays refer to displays used for the primary interpretation of mammography imaging.*			
DISP2.1		**Mammography displays have appropriate technical specifications.**			New
DISP2.1.1	**M**	Mammography displays have a graphic bit depth of 8-bits or greater. *Guidance: BIT depth is the number of bits used to define each pixel. The greater the bit depth, the larger greyscale can be displayed.*	H	ACR-AAPM-SIIM-TS.Electronic.MI	New
DISP2.1.2	**M**	Mammography displays are LED backlight, in-plane switching (IPS), liquid crystal displays (LCDs).	H	ACR-AAPM-SIIM-TS.Electronic.MI	New
DISP2.1.3	**B**	Mammography displays have an integrated photometer. *Guidance: Photometer is a device used to measure photometric quantities of visible light, such as luminance and illuminance.*		ACR-AAPM-SIIM-TS.Electronic.MI	New
DISP2.1.4	**M**	Mammography display resolution is either: I. two or more displays, each with a resolution of 5 MP or greater II. one wide format display with a resolution of 10 MP or greater III. or a combination or I and II	H	II-DISP-PACS-AC-24	New
DISP2.1.5	**B**	Mammography displays have an approximate pixel pitch of 0.200 mm, and not greater than 0.215 mm. *Guidance: Pixel pitch is suitable to present all spatial frequencies perceivable by the human visual system and at a typical viewing distance an observer can see smooth tones and well-defined edges.*		ACR-AAPM-SIIM-TS.Electronic.MI	New
DISP2.1.6	**B**	Mammography displays are set to a consistent white point. *Guidance: At minimum paired diagnostic displays at a workstation are set to a consistent white point (e.g. $\Delta_{D65}(u', v') <= 0.01$). It is recommended that there is a consistent white point set for all facility mammography displays.*		ACR-AAPM-SIIM-TS.Electronic.MI	New
DISP2.1.7	**B**	Dynamic contrast ratio (DCR) features are disabled for mammography displays. *Guidance: If mammography displays have a feature where ambient light is detected and that automatically adjusts the luminance response of the display, this is disabled.*		II-DISP-PACS-AC-24	New

No.		Description	Risk	Reference	Change
DISP2.2		**Acceptance testing is performed after purchase and prior to clinical use of mammography displays.** *Guidance: Acceptance testing of mammography displays is performed in the intended physical environment (i.e. reading room) under typical reading conditions, as applicable.*			New
DISP2.2.1	**M**	Acceptance testing of mammography displays includes a quantitative evaluation of the maximum luminance L'_{max} (including ambient luminance) under typical reading conditions. *Guidance: L'_{max} is 350 cd/m^2 or greater. It is recommended that L'max is 420 cd/m^2 or greater. The technical capability of the display may have a luminance maximum of much higher than 420 cd/m^2, but the human visual system is limited, hence displays should be calibrated to ensure luminance maximums are not too high. The operating/calibrated luminance maximum and luminance minimum (including ambient luminance) are appropriate to ensure a luminance ratio of 250 to 450 is achieved.*	H	II-DISP-PACS-AC-24	New
DISP2.2.2	**M**	Acceptance testing of mammography displays includes a quantitative evaluation of the minimum luminance L'_{min} (including ambient luminance) under typical reading conditions. *Guidance L'_{min} is 1.2 cd/m^2 or greater. The technical capability of the display may have a luminance minimum of much less, but the human visual system is very poor in the very darkest of grey values, hence displays should be calibrated to ensure luminance minimums are not too low. The operating/calibrated luminance maximum and luminance minimum (including ambient luminance) are appropriate to ensure a luminance ratio of 250 to 450 is achieved.*	H	II-DISP-PACS-AC-24	New
DISP2.2.3	**M**	Acceptance testing of mammography displays includes a quantitative evaluation of the luminance ratio (including ambient luminance) under typical reading conditions. *Guidance: Luminance ratio is 250 to 450. It is recommended that the luminance ratio is 350. LR = L'max/L'min.*	H	AAPM-270	New
DISP2.2.4	**M**	Acceptance testing of mammography displays includes a quantitative evaluation of luminance response. *Guidance: Luminance response is within 10% of the DICOM GSDF.*	H	AAPM-270	New

No.		Description	Risk	Reference	Change
DISP2.2.5	**M**	Acceptance testing of mammography displays includes a quantitative evaluation of ambient luminance and illuminance. *Guidance: The ambient ratio, L_{amb}/L_{min}, is ¼ or less under typical conditions and ambient illuminance is maintained at 25 to 75 lux.*	H	AAPM-270	New
DISP2.2.6	**M**	Acceptance testing of mammography displays includes a quantitative evaluation of luminance uniformity, maximum luminance between monitors and luminance range.	H	Mammo-AC-23	New
DISP2.2.7	**B**	Acceptance testing of mammography displays includes a qualitative evaluation of noise. *Guidance: Noise effects do not impact clinical use.*		AAPM-270	New
DISP2.2.8	**B**	Acceptance testing of mammography displays includes a qualitative evaluation of spatial resolution. *Guidance: Pixel structure not visible under typical conditions.*		AAPM-270	New
DISP2.2.9	**B**	Acceptance testing of mammography displays includes a qualitative evaluation of temporal resolution. *Guidance: Temporal effects do not impact clinical use (i.e. mammography displays used for the interpretation of breast tomosynthesis must also be sufficiently free of lag to support the review of tomosynthesis stacks).*		AAPM-270	New
DISP2.3		**Daily quality control procedures are established and used to monitor performance of mammography displays.**			New
DISP2.3.1	**M**	Daily quality control testing of mammography displays includes an overall visual evaluation of image quality and presence of artifacts.	M	SC-36	New
DISP2.4		**Quarterly quality control procedures are established and used to monitor performance of mammography displays.**			New
DISP2.4.1	**B**	Quarterly quality control testing of mammography displays includes a qualitative evaluation of luminance response. *Guidance: All low-contrast features are visible under typical conditions.*		AAPM-270	New
DISP2.4.2	**B**	Quarterly quality control testing of mammography displays includes a qualitative evaluation of ambient luminance and illuminance. *Guidance: Low-contrast features in darkest region are visible in both no-light and normal-light settings.*		AAPM-270	New

No.		Description	Risk	Reference	Change
DISP2.4.3	**B**	Quarterly quality control testing of mammography displays includes a qualitative evaluation of uniformity. *Guidance: Non-uniformities do not impact clinical use.*		AAPM-270	New
DISP2.4.4	**B**	Quarterly quality control testing of mammography displays includes a qualitative evaluation of spatial resolution. *Guidance: Pixel structure not visible under typical conditions.*		AAPM-270	New
DISP2.5		**Annual quality control procedures are established and used to monitor performance of mammography displays.**			New
DISP2.5.1	**M**	Annual quality control testing of mammography displays includes a quantitative evaluation of the maximum luminance L'_{max} (including ambient luminance) under typical reading conditions. *Guidance: L'_{max} is 350 cd/m^2 or greater. It is recommended that L'max is 420 cd/m^2. The technical capability of the display may have a luminance maximum of much higher than 420 cd/m^2, but the human visual system is limited, hence displays should be calibrated to ensure luminance maximums are not too high. The operating/calibrated luminance maximum and luminance minimum (including ambient luminance) are appropriate to ensure a luminance ratio of 250 to 450 is achieved.*	M	II-DISP-PACS-AC-24	New
DISP2.5.2	**M**	Annual quality control testing of mammography displays includes a quantitative evaluation of the minimum luminance L'_{min} (including ambient luminance) under typical reading conditions. *Guidance: It is recommended that L'_{min} is 1.2 cd/m^2 or greater. The technical capability of the display may have a luminance minimum of much less, but the human visual system is very poor in the very darkest of grey values, hence displays should be calibrated to ensure luminance minimums are not too low. The operating/calibrated luminance maximum and luminance minimum (including ambient luminance) are appropriate to ensure a luminance ratio of 250 to 450 is achieved.*	M	II-DISP-PACS-AC-24	New
DISP2.5.3	**M**	Annual quality control testing of mammography displays includes a quantitative evaluation of the luminance ratio (including ambient luminance) under typical reading conditions. *Guidance: Luminance ratio is 250 to 450. It is recommended that the luminance ratio is 350.*	M	AAPM-270	New

No.		Description	Risk	Reference	Change
DISP2.5.4	**M**	Annual quality control testing of mammography displays includes a quantitative evaluation of luminance response. *Guidance: Luminance response is within 10% of the DICOM GSDF.*	M	AAPM-270	New
DISP2.5.5	**M**	Annual quality control testing of mammography displays includes a quantitative evaluation of ambient luminance and illuminance. *Guidance: The ambient ratio, L_{amb}/L_{min}, is ¼ or less under typical conditions and ambient illuminance is maintained at 25 to 75 lux.*	M	AAPM-270	New
DISP2.5.6	**M**	Annual quality control testing of mammography displays includes a quantitative evaluation of uniformity, maximum luminance between monitors and luminance range.	M	AAPM-270	New
DISP2.5.7	**B**	Annual quality control testing of mammography displays includes a qualitative evaluation of spatial resolution. *Guidance: Pixel structure not visible under typical conditions.*		AAPM-270	New

Modality display – secondary display

No.		Description	Risk	Reference	Change
					New
DISP3.0		**MODALITY DISPLAY – SECONDARY DISPLAY** *Guidance: Modality displays refer to a designated display(s) utilized by technologists to make image quality decisions (e.g. repeat imaging prior to patient discharge), create image reconstructions, and perform advanced post processing.*			
DISP3.1		**Modality displays have appropriate technical specifications.**			New
DISP3.1.1	**M**	Modality displays have a resolution of either: I. 1.2 MP or greater for modality displays used for radiography, fluoroscopy, computed tomography, magnetic resonance, ultrasound, echocardiography, and nuclear medicine II. 3 MP or greater for modality display used for mammography	H	II-DISP-PACS-AC-24	New
DISP3.1.2	**B**	Modality displays are in-plane switching (IPS), liquid crystal displays (LCDs).		II-DISP-PACS-AC-24	New
DISP3.2		**Acceptance testing is performed after purchase and prior to clinical use of modality displays.**			New
DISP3.2.1	**M**	Acceptance testing of modality displays includes a quantitative evaluation of the maximum luminance L'_{max} (including ambient luminance) under typical conditions. *Guidance: L'_{max} is 150 cd/m^2 or greater. It is recommended that L'_{max} is 250 cd/m^2 or greater. The technical capability of the display may have a luminance maximum of much higher than 250 cd/m^2, but the human visual system is limited, hence displays should be calibrated to ensure luminance maximums are not too high. The operating/calibrated luminance maximum and luminance minimum (including ambient luminance) are appropriate to ensure a luminance ratio of 150 to 450 is achieved.*	H	II-DISP-PACS-AC-24	New

No.		Description	Risk	Reference	Change
DISP3.2.2	**B**	Acceptance testing of modality displays includes a quantitative evaluation of the minimum luminance L'_{min} (including ambient luminance) under typical conditions. *Guidance: It is recommended that L'_{min} is 0.8 cd/m2 or greater. The technical capability of the display may have a luminance minimum of much less, but the human visual system is very poor in the very darkest of grey values, hence displays should be calibrated to ensure luminance minimums are not too low. The operating/calibrated luminance maximum and luminance minimum (including ambient luminance) are appropriate to ensure a luminance ratio of 150 to 450 is achieved.*		II-DISP-PACS-AC-24	New
DISP3.2.3	**M**	Acceptance testing of modality displays includes a quantitative evaluation of the luminance ratio (including ambient luminance) under typical conditions. *Guidance: Luminance ratio is 150 to 450.*	H	II-DISP-PACS-AC-24	New
DISP3.2.4	**B**	Acceptance testing of modality displays includes a quantitative evaluation of luminance response. *Guidance: Luminance response is within 20% of the DICOM GSDF.*		AAPM-270	New
DISP3.2.5	**B**	Acceptance testing of modality displays includes a quantitative evaluation of ambient luminance and illuminance. *Guidance: Ambient light is maintained as low and consistent, as reasonably feasible. Lighting is sufficient in-patient care areas to ensure staff and patient safety.*		II-DISP-PACS-AC-24	New
DISP3.2.6	**B**	Acceptance testing of modality displays includes a qualitative evaluation of luminance uniformity. *Guidance: Non-uniformities do not impact use.*		AAPM-270	New
DISP3.2.7	**B**	Acceptance testing of modality displays includes a qualitative evaluation of noise. *Guidance: Noise effects do not impact clinical use.*		AAPM-270	New
DISP3.2.8	**B**	Acceptance testing of modality displays includes a qualitative evaluation of spatial resolution. *Guidance: Pixel structure not visible under typical conditions.*		AAPM-270	New
DISP3.3		**Routine quality control procedures are established and used to monitor performance of modality displays.**			New

No.		Description	Risk	Reference	Change
DISP3.3.1	**M**	Routine quality control testing of modality displays includes an overall visual evaluation of image quality and presence of artifacts; the frequency is either: I. monthly for modality displays used for radiography, fluoroscopy, computed tomography, magnetic resonance, ultrasound, echocardiography, and nuclear medicine II. weekly for modality displays used for mammography	M	II-DISP-PACS-AC-24	New
DISP3.4		**Annual quality control procedures are established and used to monitor performance of modality displays.**			New
DISP3.4.1	**M**	Annual quality control testing of modality displays includes a quantitative evaluation of the maximum luminance L'_{max} (including ambient luminance) under typical conditions. *Guidance: L'_{max} is 150 cd/m^2 or greater. It is recommended that L'_{max} is 250 cd/m^2 or greater. The technical capability of the display may have a luminance maximum of much higher than 250 cd/m^2, but the human visual system is limited, hence displays should be calibrated to ensure luminance maximums are not too high. The operating/calibrated luminance maximum and luminance minimum (including ambient luminance) are appropriate to ensure a luminance ratio of 150 to 450 is achieved.*	M	II-DISP-PACS-AC-24	New
DISP3.4.2	**B**	Annual quality control testing of modality displays includes a quantitative evaluation of the minimum luminance L'_{min} (including ambient luminance) under typical conditions. *Guidance: It is recommended that L'_{min} is 0.8 cd/m2 or greater. The technical capability of the display may have a luminance minimum of much less, but the human visual system is very poor in the very darkest of grey values, hence displays should be calibrated to ensure luminance minimums are not too low. The operating/calibrated luminance maximum and luminance minimum (including ambient luminance) are appropriate to ensure a luminance ratio of 150 to 450 is achieved.*		II-DISP-PACS-AC-24	New
DISP3.4.3	**M**	Annual quality control testing of modality displays includes a quantitative evaluation of the luminance ratio (including ambient luminance) under typical conditions. *Guidance: Luminance ratio is 150 to 450.*	M	II-DISP-PACS-AC-24	New

No.		Description	Risk	Reference	Change
DISP3.4.4	**B**	Annual quality control testing of modality displays includes a quantitative evaluation of luminance response. *Guidance: Luminance response is within 20% of the DICOM GSDF and all low-contrast features are visible under typical conditions.*		AAPM-270	New
DISP3.4.5	**B**	Annual quality control testing of modality displays includes a quantitative evaluation of ambient luminance and illuminance. *Guidance: Ambient light is maintained as low and consistent, as reasonably feasible. Lighting is sufficient in-patient care areas to ensure staff and patient safety.*		AAPM-270	New
DISP3.4.6	**B**	Annual quality control testing of modality displays includes a qualitative evaluation of uniformity. *Guidance: Non-uniformities do not impact use.*		AAPM-270	New
DISP3.4.7	**B**	Annual quality control testing of modality displays includes a qualitative evaluation of spatial resolution. *Guidance: Pixel structure not visible under typical conditions.*		AAPM-270	New

Interventional displays – secondary display

No.		Description	Risk	Reference	Change
					New
DISP4.0		**INTERVENTIONAL DISPLAYS – SECONDARY DISPLAY** *Guidance: Interventional displays refer to all displays used for guidance, navigation or reference during the performance of interventional procedures. Interventional displays may be a separate display or located at the acquisition console. The DAP interventional display standards align closely with the performance criteria of modality displays. The American Association of Physicists in Medicine, AAPM, recommends that displays used for interventional procedure guidance should have the same performance criteria as diagnostic displays, which is a higher standard. As the immediate implementation of diagnostic quality displays in all interventional procedure environments is a significant budgetary concern, health care providers using displays which conformance to DAP interventional display standards should understand the display limitations when making a medical diagnosis or patient care decision.*			
DISP4.1		**Interventional displays have appropriate technical specifications.**			New
DISP4.1.1	**M**	Interventional displays have a resolution of either: I. 1.5 MP or greater for interventional displays used for radiography, fluoroscopy, computed tomography, magnetic resonance, ultrasound, echocardiography, and nuclear medicine II. 3 MP or greater for interventional display used for mammography	H	II-DISP-PACS-AC-24	New
DISP4.1.2	**B**	Interventional displays are in-plane switching (IPS), liquid crystal displays (LCDs).		II-DISP-PACS-AC-24	New
DISP4.2		**Acceptance testing is performed after purchase and prior to clinical use of interventional displays.**			New

No.		Description	Risk	Reference	Change
DISP4.2.1	**M**	Acceptance testing of interventional displays includes a quantitative evaluation of the maximum luminance L'_{max} (including ambient luminance) under typical conditions. *Guidance: L'_{max} is 170 cd/m^{2}or greater. It is recommended that L'_{max} is 250 cd/m^2 or greater. The technical capability of the display may have a luminance maximum of much higher than 250 cd/m^2, but the human visual system is limited, hence displays should be calibrated to ensure luminance maximums are not too high. The operating/calibrated luminance maximum and luminance minimum (including ambient luminance) are appropriate to ensure a luminance ratio of 170 to 450 is achieved.*	H	II-DISP-PACS-AC-24	New
DISP4.2.2	**B**	Acceptance testing of interventional displays includes a quantitative evaluation of the minimum luminance L'_{min} (including ambient luminance) under typical conditions. *Guidance: It is recommended that L'_{min} is 0.8 cd/m2 or greater. The technical capability of the display may have a luminance minimum of much less, but the human visual system is very poor in the very darkest of grey values, hence displays should be calibrated to ensure luminance minimums are not too low. The operating/calibrated luminance maximum and luminance minimum (including ambient luminance) are appropriate to ensure a luminance ratio of 170 to 450 is achieved.*		II-DISP-PACS-AC-24	New
DISP4.2.3	**M**	Acceptance testing of interventional displays includes a quantitative evaluation of the luminance ratio (including ambient luminance) under typical conditions. *Guidance: Luminance ratio 170 to 450. It is recommended that the luminance ratio is 250 to 450.*	H	II-DISP-PACS-AC-24	New
DISP4.2.4	**B**	Acceptance testing of interventional displays includes a quantitative evaluation of luminance response. *Guidance: Luminance response is within 20% of the DICOM GSDF and all low-contrast features are visible under typical conditions.*		II-DISP-PACS-AC-24	New
DISP4.2.5	**B**	Acceptance testing of interventional displays includes a quantitative evaluation of ambient luminance and illuminance. *Guidance: Ambient light is maintained as low and consistent, as reasonably feasible. Lighting is sufficient in-patient care areas to ensure staff and patient safety.*		II-DISP-PACS-AC-24	New

No.		Description	Risk	Reference	Change
DISP4.2.6	**B**	Acceptance testing of interventional displays includes a qualitative evaluation of luminance uniformity. *Guidance: Non-uniformities do not impact use.*		II-DISP-PACS-AC-24	New
DISP4.2.7	**B**	Acceptance testing of interventional displays includes a qualitative evaluation of noise. *Guidance: Noise effects do not impact clinical use.*		II-DISP-PACS-AC-24	New
DISP4.2.8	**B**	Acceptance testing of interventional displays includes a qualitative evaluation of spatial resolution. *Guidance: Pixel structure not visible under typical conditions.*		II-DISP-PACS-AC-24	New
DISP4.3		**Routine quality control procedures are established and used to monitor performance of interventional displays.**			New
DISP4.3.1	**M**	Routine quality control testing of interventional displays includes an overall visual evaluation of image quality and presence of artifacts; the frequency is either: I. monthly for interventional displays used for radiography, fluoroscopy, computed tomography, magnetic resonance, ultrasound, echocardiography, nuclear and medicine II. weekly for interventional displays used for mammography	M	II-DISP-PACS-AC-24	New
DISP4.4		**Annual quality control procedures are established and used to monitor performance of interventional displays.**			New
DISP4.4.1	**M**	Annual quality control testing of interventional displays includes a quantitative evaluation of the maximum luminance L'_{max} (including ambient luminance) under typical conditions. *Guidance: L'_{max} is 170 cd/m^2 or greater. It is recommended that L'_{max} is 250 cd/m^2 or greater. The technical capability of the display may have a luminance maximum of much higher than 250 cd/m^2, but the human visual system is limited, hence displays should be calibrated to ensure luminance maximums are not too high. The operating/calibrated luminance maximum and luminance minimum (including ambient luminance) are appropriate to ensure a luminance ratio of 170 to 450 is achieved.*	M	II-DISP-PACS-AC-24	New

No.		Description	Risk	Reference	Change
DISP4.4.2	**B**	Annual quality control testing of interventional displays includes a quantitative evaluation of the minimum luminance L'_{min} (including ambient luminance) under typical conditions. *Guidance: It is recommended that L'_{min} is 0.8 cd/m2 or greater. The technical capability of the display may have a luminance minimum of much less, but the human visual system is very poor in the very darkest of grey values, hence displays should be calibrated to ensure luminance minimums are not too low. The operating/calibrated luminance maximum and luminance minimum (including ambient luminance) are appropriate to ensure a luminance ratio of 170 to 450 is achieved.*		II-DISP-PACS-AC-24	New
DISP4.4.3	**M**	Annual quality control testing of interventional displays includes a quantitative evaluation of the luminance ratio (including ambient luminance) under typical conditions. *Guidance: Luminance ratio is 170 to 450. It is recommended that the luminance ratio is 250 to 450.*	M	II-DISP-PACS-AC-24	New
DISP4.4.4	**B**	Annual quality control testing of interventional displays includes a quantitative evaluation of luminance response. *Guidance: Luminance response is within 20% of the DICOM GSDF and all low-contrast features are visible under typical conditions.*		II-DISP-PACS-AC-24	New
DISP4.4.5	**B**	Annual quality control testing of interventional displays includes a quantitative evaluation of ambient luminance and illuminance. *Guidance: Ambient light is maintained as low and consistent, as reasonably feasible. Lighting is sufficient in-patient care areas to ensure staff and patient safety.*		II-DISP-PACS-AC-24	New
DISP4.4.6	**B**	Annual quality control testing of interventional displays includes a qualitative evaluation of luminance uniformity. *Guidance: Non-uniformities do not impact use.*		II-DISP-PACS-AC-24	New
DISP4.4.7	**B**	Acceptance testing of interventional displays includes a qualitative evaluation of spatial resolution. *Guidance: Pixel structure not visible under typical conditions.*		II-DISP-PACS-AC-24	New

Clinical specialist – secondary display

No.		Description	Risk	Reference	Change
					New
DISP5.0		**CLINICAL SPECIALIST DISPLAYS – SECONDARY DISPLAY** *Guidance: Clinical specialist displays refers all displays which physicians review patient images for the purpose of making a healthcare management decision. The DAP clinical specialist display standards align closely with the performance criteria of modality displays. The American Association of Physicists in Medicine (AAPM) recommends that clinical specialist displays should have the same performance criteria as diagnostic displays, which is a higher standard. As the immediate implementation of diagnostic quality displays in all physician patient image review environments is a significant budgetary concern, health care providers using displays which conform to DAP clinical specialist display standards should understand the display limitations when making a medical diagnosis or patient care decision. For the purposes of the DAP, clinical specialist displays which are in the medical imaging department or managed by medical imaging are only considered.*			
DISP5.1		**Clinical specialist displays have appropriate technical specifications.**			New
DISP5.1.1	**M**	Clinical specialist displays have a resolution of either: I. 1.5 MP or greater for interventional and clinical specialist displays used for radiography, fluoroscopy, computed tomography, magnetic resonance, ultrasound, echocardiography, and nuclear medicine II. 3 MP or greater for interventional and clinical specialist display used for mammography	H	II-DISP-PACS-AC-24	New
DISP5.1.2	**B**	Clinical specialist displays are in-plane switching (IPS), liquid crystal displays (LCDs).		II-DISP-PACS-AC-24	New
DISP5.2		**Acceptance testing is performed after purchase and prior to clinical use of clinical specialist displays.**			New

No.		Description	Risk	Reference	Change
DISP5.2.1	**M**	Acceptance testing of clinical specialist displays includes a quantitative evaluation of the maximum luminance L'_{max} (including ambient luminance) under typical conditions. *Guidance: L'_{max} is 170 cd/m^2 or greater. It is recommended that L'_{max} is 250 cd/m^2 or greater. The technical capability of the display may have a luminance maximum of much higher than 250 cd/m^2, but the human visual system is limited, hence displays should be calibrated to ensure luminance maximums are not too high. The operating/calibrated luminance maximum and luminance minimum (including ambient luminance) are appropriate to ensure a luminance ratio of 170 to 450 is achieved.*	H	II-DISP-PACS-AC-24	New
DISP5.2.2	**B**	Acceptance testing of clinical specialist displays includes a quantitative evaluation of the minimum luminance L'_{min} (including ambient luminance) under typical conditions. *Guidance: It is recommended that L'_{min} is 0.8 cd/m2 or greater. The technical capability of the display may have a luminance minimum of much less, but the human visual system is very poor in the very darkest of grey values, hence displays should be calibrated to ensure luminance minimums are not too low. The operating/calibrated luminance maximum and luminance minimum (including ambient luminance) are appropriate to ensure a luminance ratio of 170 to 450 is achieved.*		II-DISP-PACS-AC-24	New
DISP5.2.3	**M**	Acceptance testing of clinical specialist displays includes a quantitative evaluation of the luminance ratio (including ambient luminance) under typical conditions. *Guidance: Luminance ratio 170 to 450. It is recommended that the luminance ratio is 250 to 450.*	H	II-DISP-PACS-AC-24	New
DISP5.2.4	**B**	Acceptance testing of clinical specialist displays includes a quantitative evaluation of luminance response. *Guidance: Luminance response is within 20% of the DICOM GSDF and all low-contrast features are visible under typical conditions.*		II-DISP-PACS-AC-24	New
DISP5.2.5	**B**	Acceptance testing of clinical specialist displays includes a quantitative evaluation of ambient luminance and illuminance. *Guidance: Ambient light is maintained as low and consistent, as reasonably feasible. Lighting is sufficient in-patient care areas to ensure staff and patient safety.*		II-DISP-PACS-AC-24	New

No.		Description	Risk	Reference	Change
DISP5.2.6	**B**	Acceptance testing of clinical specialist displays includes a qualitative evaluation of luminance uniformity. *Guidance: Non-uniformities do not impact use.*		II-DISP-PACS-AC-24	New
DISP5.2.7	**B**	Acceptance testing of clinical specialist displays includes a qualitative evaluation of noise. *Guidance: Noise effects do not impact clinical use.*		II-DISP-PACS-AC-24	New
DISP5.2.8	**B**	Acceptance testing of clinical specialist displays includes a qualitative evaluation of spatial resolution. *Guidance: Pixel structure not visible under typical conditions.*		II-DISP-PACS-AC-24	New
DISP5.3		**Routine quality control procedures are established and used to monitor performance of clinical specialist displays.**			New
DISP5.3.1	**M**	Routine quality control testing of clinical specialist displays includes an overall visual evaluation of image quality and presence of artifacts; the frequency is either: I. monthly for interventional displays used for radiography, fluoroscopy, computed tomography, magnetic resonance, ultrasound, echocardiography, nuclear and medicine II. weekly for interventional displays used for mammography	M	II-DISP-PACS-AC-24	New
DISP5.4		**Annual quality control procedures are established and used to monitor performance of clinical specialist displays.**			New
DISP5.4.1	**M**	Annual quality control testing of clinical specialist displays includes a quantitative evaluation of the maximum luminance L'_{max} (including ambient luminance) under typical conditions. *Guidance: L'_{max} is 170 cd/m^{2}or greater. It is recommended that L'_{max} is 250 cd/m^2 or greater. The technical capability of the display may have a luminance maximum of much higher than 250 cd/m^2, but the human visual system is limited, hence displays should be calibrated to ensure luminance maximums are not too high. The operating/calibrated luminance maximum and luminance minimum (including ambient luminance) are appropriate to ensure a luminance ratio of 170 to 450 is achieved.*	M	II-DISP-PACS-AC-24	New

No.		Description	Risk	Reference	Change
DISP5.4.2	**B**	Annual quality control testing of clinical specialist displays includes a quantitative evaluation of the minimum luminance L'_{min} (including ambient luminance) under typical conditions. *Guidance: It is recommended that L'_{min} is 0.8 cd/m^2 or greater. The technical capability of the display may have a luminance minimum of much less, but the human visual system is very poor in the very darkest of grey values, hence displays should be calibrated to ensure luminance minimums are not too low. The operating/calibrated luminance maximum and luminance minimum (including ambient luminance) are appropriate to ensure a luminance ratio of 170 to 450 is achieved.*		II-DISP-PACS-AC-24	New
DISP5.4.3	**M**	Annual quality control testing of clinical specialist displays includes a quantitative evaluation of the luminance ratio (including ambient luminance) under typical conditions. *Guidance: Luminance ratio is 170 to 450. It is recommended that the luminance ratio is 250 to 450.*	M	II-DISP-PACS-AC-24	New
DISP5.4.4	**B**	Annual quality control testing of clinical specialist displays includes a quantitative evaluation of luminance response. *Guidance: Luminance response is within 20% of the DICOM GSDF and all low-contrast features are visible under typical conditions.*		II-DISP-PACS-AC-24	New
DISP5.4.5	**B**	Annual quality control testing of clinical specialist displays includes a quantitative evaluation of ambient luminance and illuminance. *Guidance: Ambient light is maintained as low and consistent, as reasonably feasible. Lighting is sufficient in-patient care areas to ensure staff and patient safety.*		II-DISP-PACS-AC-24	New
DISP5.4.6	**B**	Annual quality control testing of clinical specialist displays includes a qualitative evaluation of luminance uniformity. *Guidance: Non-uniformities do not impact use.*		II-DISP-PACS-AC-24	New
DISP5.4.7	**B**	Acceptance testing of clinical specialist displays includes a qualitative evaluation of spatial resolution. *Guidance: Pixel structure not visible under typical conditions.*		II-DISP-PACS-AC-24	New

Appropriate physical environment

No.		Description	Risk	Reference	Change
					New
DISP6.0		**DISPLAY PHYSICAL ENVIRONMENT**			
DISP6.1		**The physical environment of diagnostic displays is appropriate (i.e. reading room).**			New
DISP6.1.1	**M**	Lighting conditions minimize specular and diffuse light reflection on diagnostic displays.	M	II-DISP-PACS-AC-24	New
DISP6.1.2	**M**	Diagnostic display locations do not compromise patient confidentiality.	M	II-DISP-PACS-AC-24	New
DISP6.1.3	**M**	Diagnostic displays automatically log off when inactive for a predetermined length of time.	M	II-DISP-PACS-AC-24	New
DISP6.2		**The physical environment of mammography displays is appropriate (i.e. reading room).**			New
DISP6.2.1	**M**	Lighting conditions minimize specular and diffuse light reflection on mammography displays.	M	II-DISP-PACS-AC-24	New
DISP6.2.2	**M**	Mammography display locations do not compromise patient confidentiality.	M	II-DISP-PACS-AC-24	New
DISP6.2.3	**M**	Mammography displays automatically log off when inactive for a predetermined length of time.	M	II-DISP-PACS-AC-24	New
DISP6.3		**The physical environment of modality displays is appropriate.**			New
DISP6.3.1	**M**	Lighting conditions minimize specular and diffuse light reflection on modality displays. *Guidance: It is recommended that lighting around modality displays is dimmable to minimize specular and diffuse light reflection.*	M	II-DISP-PACS-AC-24	New
DISP6.3.2	**M**	Modality display locations do not compromise patient confidentiality.	M	II-DISP-PACS-AC-24	New
DISP6.3.3	**M**	Modality displays automatically log off when inactive for a predetermined length of time.	M	II-DISP-PACS-AC-24	New
DISP6.4		**The physical environment of interventional display is appropriate.**			New
DISP6.4.1	**M**	Interventional display locations do not compromise patient confidentiality.	M	II-DISP-PACS-AC-24	New

No.		Description	Risk	Reference	Change
DISP6.4.2	**B**	Interventional displays can be readily viewed by the individual(s) performing the interventional procedure.		II-DISP-PACS-AC-24	New
DISP6.5		**The physical environment of clinical specialist is appropriate.**			New
DISP6.5.1	**M**	Clinical specialist display locations do not compromise patient confidentiality.	M	II-DISP-PACS-AC-24	New

Digitization

No.		Description	Risk	Reference	Change
DISP7.0		**DIGITIZATION EQUIPMENT**			New
DISP7.1		**Medical imaging digitization equipment have appropriate technical specifications.**			New
DISP7.1.1	**M**	Digitization equipment have 12 bits of precision or greater.	M	ACR-AAPM-SIIM-TS.Electronic.MI	New
DISP7.1.2	**M**	For radiography, digitization equipment has a limiting spatial resolution of 2.5 line pairs/mm or greater.	M	ACR-AAPM-SIIM-TS.Electronic.MI	New
DISP7.1.3	**M**	For mammography, digitization equipment has a limiting spatial resolution of 5.0 line pairs/mm or greater.	M	ACR-AAPM-SIIM-TS.Electronic.MI	New
DISP7.1.4	**M**	For mammography, digitization equipment conforms to the IHE Mammography Image Profile.	M	II-DISP-PACS-AC-24	New
DISP7.2		**Routine quality control testing of medical imaging digitization equipment.**			New
DISP7.2.1	**M**	Routine quality control testing of digitization equipment is performed as per manufacturer's recommendations.	M	II-DISP-PACS-AC-24	New
DISP7.2.2	**M**	Digitization equipment is routinely cleaned.	M	II-DISP-PACS-AC-24	New

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Abbreviation	Reference
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