QUAL 370 – Quality Assurance and Control

Quality Assurance (QA) Tests Reading Guide

Textbook/Resources:

Health Canada. (2008) Safety Code 35: Safety Procedures for the Installation, Use and Control of X-ray Equipment in Large Medical Radiological Facilities. (HC Pub: 4000) Retrieved from http://www.hc-sc.gc.ca/ewh-semt/pubs/radiation/safety-code_35-securite/index-eng.php#share.

Papp, J. (n.d). Quality management in the imaging sciences (5th ed.). St. Louis, MO: Elsevier Mosby, 2015.

Test	Name	Textbook Readings	Safety Code 35 Readings (This supersedes all other texts).
1	Reproducibility/Repeatability Test	Papp, 5th Ed. pg. 97-98, 101-102	SC35, B 2.5 2.1
2	kVp Accuracy Test	Papp, 5th Ed. pg. 98-99	SC35, pg. 52 Y3
3	mA Linearity Test	Papp, 5th Ed. pg. 103	SC35 pg 25
4	Timer Accuracy Test	Papp, 5th Ed. pg. 101-102	SC35 pg 25
5	AEC Reproducibility	Papp, 5th Ed. pg. 111-113	SC35 pg 25
6	AEC Field Balance/Uniformity Test	Papp, 5th Ed. pg. 111-113	SC35 pg 25
7	AEC Density Control Test	Papp, 5th Ed. pg. 111-113	SC35 pg 25

8	AEC Sensitivity Test	Papp, 5th Ed. pg. 111-113	SC35 pg 25
9	Leakage Test		SC35 pg 24
10	Visual Inspection Test	Papp, 5th Ed. pg. 126-128	SC35 pg. 23, 24
11	Automatic Collimation (PBL) Test	Papp, 5th Ed. pg. 105-107	SC35, pg. 25 (2.5.2(8 & 9)), 53(Y9), 74 -76 (11-17)
12	Collimator Light/x-ray Field Congruence and Perpendicularity Test	Papp, 5th Ed. pg. 107-108	SC35 pg 25, 75 (This supersedes all other texts).
13	HVL Test	Papp, 5th Ed. pg. 98-99	SC35 pg 24 (This supersedes all other texts)
14	Lead Apparel Testing	Papp, 5th Ed. pg. 95	SC35 pg 35 (This supersedes all other texts).
15	Visual Inspection Fluoroscopy Unit	Papp, 5th Ed. pg. 126-127	
16	Fluoroscopy kVp Accuracy Test	Papp, 5th Ed. pg. 129	SC35 pg 25 (This supersedes all other texts).
17	Maximum Fluoroscopic Exposure Rate Test	Papp, 5th Ed. pg. 130	SC35 pg 26, 54 (This supersedes all other texts).
18	Fluoroscopic Field Size and Beam Alignment	See Papp 5th edition pg 107-108	SC 35 pg 21, 25
19	Fluoroscopic Line Pair/mm Test	Papp, 5th Ed. pg. 131 (spatial resolution)	SC35, pg. 54 (3.6.2 (Y15))
20	Fluoroscopic Low Contrast Resolution	Papp, 5th Ed. pg. 132	
21	High-Contrast (Spatial) Resolution	Papp 5th edition pg 131	
22	Fluoroscopic Image Lag	Papp 5th edition pg 132-134 (including rotating test tool)	SC 35 pg 54 (Y22)