

Manufacturer's Recommendations for Alternate Dental CBCT QA Program
Imaging Sciences International: Model I-CAT Classic
Table 3A Computed Tomography QC Requirements

Item	Required Test or Procedure	Frequency	Substitute Test or Procedure	Standard
1	Equipment Function "Indicators, Mechanical & other Safety Checks	Daily	Operator's Manual Pages i-2 to 1-4 (Appendix E)	Must work properly
2	Film Processing QC Testing	None	None, not applicable	None, not applicable
3	CT Number for Water	Daily	Operators Manual Chapter 5 Pages 5-4 to 5-6 (Appendix C)	Difference of Avg. HU and each HU = < 70 HU for all 5 quadrant CT #'s
4	Field Uniformity	Daily	Operators Manual Chapter 5 Pages 5-4 to 5-6 (Appendix C)	Difference of Avg. HU and each HU = <70 HU for all 5 quadrant CT #'s
5	Laser Film Printer QC	None	None, not applicable	None, not applicable
6	Low Contrast Resolution	Initial & Annually	QA test to be performed using appropriate Low Contrast phantom. Low Contrast phantom is not provided by Imaging Sciences International	To be established by Medical Physicist
7	High Contrast Resolution	Initial & Annually	Operators Manual Chapter 5 Pages 5-2 to 5-3 (Appendix C)	Distinguish resolution for range of 10, 11, & 12 lp /cm minimum
8	Noise	Initial & Annually	Operators Manual Chapter 5 Pages 5-4 & 5-5 (Appendix C)	Noise < 50 (Avg. of Standard Deviation of Mean CT Number Measurements)
9	Scan Localization Light Accuracy	Initial & Annually	Installation Manual, Chapter 4: Mechanical alignment & calibration Pages 36 - 43 (Appendix D)	Laser light is positioned on the center of the hash marks on the sensor frame.
10	Medical Physicist's QC Survey	Initial & Annually	Same as alternate Dental CBCT	NJAC 7:28-22.10
11	Medical Physicist's Quality Assurance Program Review	Initial & Annually	Same as alternate Dental CBCT	NJAC 7:28-22.4(a)7