

Manufacturer's Recommendations for Alternate Dental CBCT QA Program
Carestream Health: Models 9500, CS 9300, CS 9300 Select, CS 9000 3D, and CS 8100 3D

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	Same as Alternate Dental CBCT and or; Reference: Safety, Regulatory and Technical Specification User Guide Pages 1-6 (9500) (Appendix D)	Unit must pass all computerized system tests. CBCT unit must work properly
2	Film Processing QC Testing	Daily	None, not applicable	None, not applicable
3	CT Number for Water	Daily	QA Testing Procedure Carestream 3D Products Procedure –Page 4 Item 9 Noise & Homogeneity (Appendix B)	The software computes automatically the signal/noise and homogeneity values. The Green bar indicates test has passed.
4	Field Uniformity	Daily	QA Testing Procedure Carestream 3D Products Procedure –Page 4, Item 9 Noise & Homogeneity (Appendix B)	The software computes automatically the signal/noise and homogeneity values. The Green bar indicates test has passed.
5	Laser Film Printer QC	Weekly	None, not applicable	None, not applicable
6	Low Contrast Resolution	Initial & Annually	QA Testing Procedure Carestream Imaging Quality Control Procedure –Page 37, Item 2.5.1.3.3 Low Contrast measurement (Appendix C)	Test phantom contains 4 circles that are used to do the Low Contrast measurement. The intent of this test is to assure that contrast ability remains constant over time. Standard to be established by Medical Physicist.
7	High Contrast Resolution	Initial & Annually	QA Testing Procedure Carestream 3D Products Procedure Page 5, Item 12 MTF measurement (Appendix B)	MTF is automatically computed and its value at 10% is displayed
8	Noise	Initial & Annually	QA Testing Procedure Carestream 3D Products Procedure –Page 4 Item 9 Noise & Homogeneity (Appendix B)	The software computes automatically the signal/noise and homogeneity values. The Green bar indicates test has passed.
9	Scan Localization Light Accuracy	Initial & Annually	QA Testing Procedure Carestream 3D Products Procedure – Page 6, Item 13 Positioning Aid Checking (Appendix B)	The software computes automatically if test has passed. A green bar indicates test has passed.

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 CBC	NJAC 7:28-22.4(a)7

Where no performance standard is identified or expressed by the manufacture, the medical physicist shall establish the standard for the facility's CBCT unit with justification.