

Manufacturer's Recommendations for Alternate Dental CBCT QA Program

Hiossen Model: T1-C & T1-CS

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	T1 (T1-C, T1-CS) User Manual 1.2 Signs Pages: 6 to 18 (Appendix A)	Must work properly
2	Film Processing QC Testing	Daily	None – Not Applicable	None – Not Applicable
3	CT Number for Water	Daily	T1 (T1-C, T1-CS) Technical Manual 3. CT (Computed Tomography) 3.2 CT Number Pages: 18 & 19 (Appendix B)	Water: 0 ± 100 HU
4	Field Uniformity	Daily	T1 (T1-C, T1-CS) Technical Manual 3. CT (Computed Tomography) 3.6 Uniformity (Image Homogeneity) Pages: 28 & 29 (Appendix B)	Detector Model 1515DXT Homogeneity: 0 to 70 Detector Model Sen1 Homogeneity: 0 to 150
5	Laser Film Printer QC	Weekly	None – Not Applicable	None – Not Applicable
6	Low Contrast Resolution	Initial & Annually	T1 (T1-C, T1-CS) Technical Manual 3. CT (Computed Tomography) 3.9 Contrast Scale Pages: 34 & 35 (Appendix B)	Minimum: 650 Maximum: 1200
7	High Contrast Resolution	Initial & Annually	T1 (T1-C, T1-CS) Technical Manual 3. CT (Computed Tomography) 3.7 Spatial Resolution (MTF 10%) Pages: 32 & 33 (Appendix B)	10% MTF > 1
8	Noise	Initial & Annually	T1 (T1-C, T1-CS) Technical Manual 3. CT (Computed Tomography) 3.7 Noise Pages: 30 & 31 (Appendix B)	Detector Model 1515DXT Noise: ≤ 150 Detector Model Sen1 Noise: ≤ 230
9	Scan Localization Light Accuracy	Initial & Annually	T1 (T1-C, T1-CS) Technical Manual 3. CT (Computed Tomography) 3.3 Beam Alignment (Patient Positioning) Pages: 20 & 21 (Appendix B)	± 2 mm

10	Medical Physicist's QC Survey	Initial & Annually	See N.J.A.C. 7:28-22.10(a)	N.J.A.C. 7:28-22.10(a)
11	Medical Physicist's Quality Assurance Program Review	Initial & Annually	See N.J.A.C. 7:28-22.10(a)	N.J.A.C. 7:28-22.4(a)7