

Manufacturer's Recommendations for Alternate Dental CBCT QA Program

Sordex : Model Scanora 3Dx (Palodex Group)

Table 3A Requirements for Dental CBCT

Item	Required Test or Procedure	Frequency	Substitute Test or Procedure	Standard
1	Equipment Function "Indicators, Mechanical & other Safety Checks	Daily	User manual Section 7.1 & 7.2, Checking that the unit operates correctly Page 70 and 71 (Appendix A) User Manual Section 2.1 Main parts and controls Page 6-13 (Appendix B)	Unit must work properly
2	Film Processing QC Testing	Daily	None, not applicable	None, not applicable
3	CT Number for Water	Daily	3D Constancy Check Procedure, Section 1. Automatic 3D QC program (Appendix D)	Pass Scanora QC phantom computerized software test: The test result and acceptance limit is displayed by the device. Minimum PMMA ROI: - 95
4	Field Uniformity	Daily	3D Constancy Check Procedure Section 1. Automatic 3D QC program (Appendix D)	Pass Scanora QC phantom computerized software test: Uniformity Maximum Value: 200 The test result and acceptance limit is displayed by the device.
5	Laser Film Printer QC	Weekly	None, not applicable	None, not applicable
6	Low Contrast Resolution	Initial & Annually	3D Constancy Check Procedure Section 1. Automatic 3D QC program (Appendix D)	The automatic 3D QC test result is displayed by the device. Grey values are measured from the volume for PMMA, PTFE and Air. Minimum PMMA ROI value: -95 Minimum PTFE ROI value: 400 Maximum AIR ROI value: -500
7	High Contrast Resolution	Initial & Annually	3D Constancy Check Procedure Section 3. High Contrast spatial resolution (Appendix D)	Constancy test phantom Visually identifiable spatial resolution must be at least 1LP/mm.
8	Noise	Initial & Annually	3D Constancy Check Procedure Section 1. Automatic 3D QC program (Appendix D)	Pass Scanora QC phantom software test : Maximum PMMA Std. Dev.: 125 Maximum PTFE Std. Dev.: 145 Maximum Air Std. Dev.: 100 The test result and acceptance limit is displayed by the device.
9	Scan Localization Light Accuracy	Initial & Annually	Installation and Set-up Instructions. Sections 5. Unit calibration and adjustment Page 73 and 74 (Appendix E)	If the 3D geometric calibration is successful all the calibration values that appear on the image will be 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 CBCT	NJAC 7:28-22.4(a)7