

Manufacturer's Recommendations for Alternate Dental CBCT QA Program

Owandy: Model I-Max 3D

Table 3 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 3 Safety Information Pages 8-13 Appendix A	Must Work Properly
2	Film Processing QC Testing	Daily	N/A	N/A
3	CT Number for Water	Daily	User Manual Quality Assurance Program Section 7.5.6 CT number for water Page 62 Appendix A	The mean value must be in the range from -100 to +100 HU
4	Field Uniformity	Daily	User Manual Quality Assurance Program Section 7.5.9 Homogeneity Page 63 Appendix A	The Homogeneity value must be greater or equal to 5
5	Laser Film Printer QC	Weekly	None	None
6	Low Contrast Resolution	Initial & Annually	User Manual Quality Assurance Program Section 7.5.4 Contrast to Noise ration Page 61 Appendix A	Verify that the CNR value is greater or equal to 400.
7	High Contrast Resolution (Modular Transfer Function - MTF 10% and MTF 50%)	Initial & Annually	User Manual Quality Assurance Program Section 7.5.5 Spatial Resolution Page 62 Appendix A	MTF 10% Value must be greater than 1 Lp/mm MTF 50% must be recorded
8	Noise	Initial & Annually	User Manual Quality Assurance Program Section 7.5.4 Contrast to Noise ration Page 61 Appendix A	Verify that the CNR value is greater or equal to 4.
9	Scan Localization Light Accuracy	Initial & Annually	User Manual Quality Assurance Program Section 7 Laser alignment check Page 49 Appendix A	Check that the mid- sagittal laser beam is aligned to the reference line of the support plate (± 3 mm). In case the test fails, repeat it checking that there is no mechanical interference. If misalignment is still present, call technical assistance

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