

Manufacturer's Recommendations for Alternate Dental CBCT QA Program
Planmeca: ProMax 3D Max, 3D, 3Ds, and 3D (Mid):
Table 3A Requirements for Dental CBCT

Item	Required Test or Procedure	Frequency	Planmeca Substitute Test or Procedure	Standard
1	Equipment Function: Indicators, Mechanical & other Safety Checks	Daily	Device Tool QA DIN6868 (Appendix A)	Must Pass Computerized test and Systems must work properly
2	Film Processing QC Testing	Daily	None – Not Applicable	None – Not Applicable
3	CT Number for Water	Daily	CBCT Alternative QA Test (Water Phantom) for Planmeca (Appendix B) Planmeca Quality Test Procedure – CT Number for Water (Acryl) Pages: 1 to 7 (Appendix G)	HU Range = -150 to +150 OR Acryl HU Tolerance: -200.00 – 200.00
4	Field Uniformity	Daily	Device Tool QA DIN6868 Pages: 7 & 20; (Appendix A) DIN Standard 6868-161:2012-3 Section 4.3.7.1, Page: 14 (Appendix E) Planmeca Quality Test Procedure – CT Number for Water (Acryl) Pages: 1 to 7 (Appendix G)	Homogeneity > 5 OR Acryl Uniformity Tolerance: < 50.00
5	Laser Film Printer QC	Weekly	None – Not Applicable	None – Not Applicable
6	Low Contrast Resolution	Initial & Annually	QA test to be performed using appropriate Low Contrast phantom. Low contrast test phantom is not supplied by Planmeca.	To be established by Medical Physicist *
7	High Contrast Resolution	Initial & Annually	QA Qualification Testing Procedure Pages: 1-3 (Appendix C)	The 10% MTF value (MTF10) should be above 1.00 lp/mm
8	Noise	Initial & Annually	QA Qualification Testing Procedure Pages: 1-3 (Appendix C)	Noise values (STD) should be < 500 HU for acryl and aluminum
9	Scan Localization Light Accuracy	Initial & Annually	CBCT Alternative QA Test for Planmeca (Appendix F)	+/- 5 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

*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