

Sirona Alternate Dental CBCT QA Program
Orthophos XG 3D/Cephalometric: Table 3A Requirements for Dental CBCT

Item	Required Test or Procedure	Frequency	Orthophos XG 3D/Cephalometric Substitute Test/Procedure	Standard
1	Equipment Function "Indicators, Mechanical & other Safety Checks	Daily	Same as alternate Dental CBCT	Must work properly
2	Film Processing QC Testing	None	Filmless Unit; test not applicable	None, not applicable
3	CT Number for Water	Daily	Quality Inspection Orthophos Manual Procedure 5.2-5.3 (pg 33-37)	Gray Scale Reference Value=5500; Maximum Tolerance = 11000 (100%); Minimum Tolerance = 4675 (-15%)
4	Field Uniformity	Daily	Quality Inspection Orthophos Manual Procedure 5.2-5.3 (pg 33-37)	No/few artifacts visible
5	Laser Film Printer QC	None	Not Applicable	None, not applicable
6	Low Contrast Resolution	Initial & Annually	Quality Inspection Orthophos Manual Procedure 5.2-5.3 (pg 33-37)	Reference Value = 0.002; Minimum Tolerance=0.001 (50%)
7	High Contrast Resolution	Initial & Annually	Quality Inspection Orthophos Manual Procedure 5.2-5.3 (pg 33-37)	Minimum Tolerance = 1.4 lp/mm
8	Noise	Initial & Annually	Quality Inspection Orthophos Manual Procedure 5.2-5.3 (pg 33-37)	Reference Value = 40; Tolerance (+50%) =60; Tolerance (-25%) = 30
9	Scan Localization Light Accuracy	Initial & Annually	Maintenance Instruction 3D Manual Procedure 10 Checking the Laser Light Localizers (pg 19-20)	No Alignment error allowed
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