CT Medical Physicist or Qualified Expert Report
Guidance Document

1.	Report must be signed and dated by the medical physicist or qualified expert: IAC CT Standards for medical physicist or qualified expert: Board certified medical physicist or qualified expert. Is the medical physicist or qualified expert licensed by the state or otherwise authorized to perform dose measurements and evaluate CT image quality?	*IAC CT Standards Reference Section 1.2B – 1.6B*
2.	Report must indicate if acceptance test	
3.	Report must indicate if annual survey	
4.	Report must document recommended corrective actions	
5.	Dose report to include:	*Refer to Standard 1.4B*
	a. Dose reported for typical clinical protocols	
	b. Comparison of measured dose with some reference standard, using the same dose units. Report must include if results acceptable.	
	c. Dose should be in units of pitch corrected CTDI (preferably) or point dose at the central ray for cone-beam systems or MSAD.(or IAC approved acceptable methology)	*Refer to page 36**
	d. The ion chamber/electrometer manufacturer/model must be documented	
	e. Phantom used for dose analysis must be documented on report.	
6.	Image quality report to include:	*Refer to Standard 1.4B*
	a. Low-contrast resolution (N/A for Cone Beam CT)	
	b. High-contrast spatial resolution	
	c. Reconstructed slice thickness accuracy (N/A for Cone Beam CT)	
	d. Alignment of laser light (if available on system)	
	e. CT number accuracy	
	f. Noise	
	g. Are parameters compared with a reference standard or	

	manufacturer's specification? (Some may be N/A.)	
	h. QC phantom for quality analysis must be documented on the report	
7.	Confirmation of Shielding Plan or completion at installation: The Radiation Protection Survey at installation should include:	*Refer to Standard 1.2B*
	a. Layout showing equipment location in the room and type of occupancy for adjacent areas (i.e., office, toilet, outside, corridor, etc.)	
	b. Exposure (mR, mSV or uR, uSV) or exposure rate (mR/hr or mSv /hr) measurements at multiple locations including at least the operator position and areas adjacent to (but outside of) the scanner room. Measurements outside may be omitted under some situations.	
	c. Determination of weekly workload (mAs per scan x # patients per week) or some other accept methodology	
	d. Occupancy factors specified for surrounding areas	
	e. Calculation weekly exposure to persons inside and outside the room, corrected for occupancy factor	
	f. Final assessment of results as "Acceptable," "ALARA," within restricted vs. unrestricted guidelines	
	g. Report is signed and dated by the qualified medical physicist	
	h. Recommendations, actions needed, or issues to be addressed to the facility must be included on the report, if applicable	
	Comment: The IAC CT accreditation program outlines the training and experience requirements that the medical physicist/qualified expert must meet in order to perform CT quality assurance testing. The analysis and evaluation of the quality control testing is left to the judgment of the qualified medical physicist. The primary purpose of the submission of the phantom images with the results is to verify/document the image quality analysis.	

**Download the IAC Standards and Guidelines for CT Accreditation: intersocietal.org/ct/main/ct_standards.htm*