

Comparison between effective doses of different imaging modalities applied in Orthodontics using Anthropomorphic Phantom

Thesis

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Dedication

Thanks to the Lord for
blessing me through this
journey.

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family and friends for their
continuous support, patience
and encouragement.

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List of Abbreviations

Item	Abbreviation
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2D	Two-dimensional
3D	Three-dimensional
ACC	Anatomical cranial collimator
ALADA	As low as diagnostically acceptable
ALARA	As low as reasonably achievable
ART	Alderson radiation therapy phantom
CBCT	Cone Beam Computed Tomography
CCD	Charged coupled device
CdTe	Cadmium-telluride
Ceph	Cephalometry
CIRS	Computerized imaging reference systems
CT	Computed Tomography
CTDI	Computed Tomography Dose Index
CTP	Cephalographic thyroid protector
DAP	Dose Area Product
DLP	Dose Length Product
DNA	Deoxyribonucleic acid
D_T	Absorbed dose
FFOV	Full Field of View
FOV	Field of view
HS	Highly significant
H_T	Equivalent dose
ICRP	International Commission on Radiological Protection
J	Joules
KAP	Kerma air product
KG	Kilogram

kVp	Kilovoltage
LED	light emitting diode
LFOV	Limited Field of View
mA	Milliamperage
MPR	Multiphase reconstruction
NCRP	National council on radiation protection and measurements
OSA	Obstructive sleep apnea
OSL	Optically stimulated luminescence
Pan	Panorama
RBE	Relative biological effectiveness
RPLDs	Radiophotoluminescent glass dosimeters
S	Significant
SD	Standard Deviation
SI	Système International
TLD	Thermo-luminescent dosimeters
wR	Radiation weighting factor
wT	Tissue weighting factor