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JAREFRECT

PATIENT OPTIMIZATION USING HIGH KVP TECHNIQUE WITH OPTIMAL IMAGE QUALITY FOR CHEST PA VIEW IN COMPUTED RADIOGRAPHY

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A Thesis Submitted in Partial Fulfillment of the Requirements for the Degree of Master of Science Program in Medical Imaging

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LIST OF ABBREVIATIONS

AAPM American Association of Physics in Medicine

AEC automatic exposure control

BMI body mass index
BSF back scatter factor

CEC Commission of the European Communities

CR computed radiography
CT computed tomography

DAP dose area product
DR digital radiography
DRL dose reference level

DSA digital subtraction angiography

ESD entrance surface dose

FDD focus to detector distance

HVL half value layer IP imaging plate

MHRA Medicines and Healthcare products Regulatory Agency

MRI magnetic resonance imaging

NRPB National Radiological Protection Board

PA postero-anterior

PACS Picture Archiving and Communication System

PMMA polymethyl methacrylate PMT photomultiplier tube

PSL photostimulated luminescence

PSP photostimulable phosphor

ROP remote operator panel