

# High Resolution Chest 16 Sensation

<b>Indications</b>	Cough, interstitial lung disease, emphysema, bronchiectasis, asbestosis, restrictive lung disease					
<b>Diagnostic Task</b>	Detect nodules or masses and characterize their size and shape, abnormal fluid collections in chest					
<b>Scan mode</b>	Helical/Axial					
<b>Position/Landmark</b>	Head first-Supine 1cm to shoulders/inspiration					
<b>Topogram</b>	PA 50mA 80kV					
<b>kVp/Reference mass</b>	helical120kv 180mas//axial 120kv/180mas					
<b>Rotation time/pitch</b>	helical 0.5/1.0 // axial full 0.5s					
<b>Detector Configuration</b>	helical 16x0.75 // axial 2x1.0					
<b>Table Speed/Increment</b>	helical 9.6 //axial cycle time 1.88					
<b>Dose reduction</b>	CareDose 4D					
<b>Allowed CTDI ranges*</b>	7mGy-50mGy					
<b>XR29 Dose Notification value</b>	50mGy					
<b>Helical Set Routine Chest</b>	recon	body part	thickness spacing	kernel	window	recon destination
	1	chest	2mmx 2mm	31medium smooth	mediastinum	pac
	2	lung	1.5mmx 1.5mm	70very sharp	lung	pac
	3	thin chest	1mmx.8mm	31medium smooth	mediastinum	mpr/pac
	4	lung	1mmx.8mm	b20f smooth	lung	mpr
<b>1ST axial set supine experation</b>	recon	body part	thickness spacing	kernel	window	recon destination
	1	Bilat Lung high res	1mmx20mm	70very sharp	Lung	pac
<b>2ND axial set prone inspiration</b>	recon	body part	thickness spacing	kernel	window	recon destination
	1	Bilat Lung high res	1mmx20mm	70very sharp	Lung	pac
<b>Scan Start/end location</b>	lung apex lung base					
<b>DFOV</b>	35cm on full chest/FOV limited to just lungs on lung views					
<b>3D Technique Used</b>	2x2 coronal and sag chest reformats for recon 3, from helical set					
	10mmx2mm axial mip lung from recon 5					
<b>IV contrast volume/type</b>	none					
<b>Scan delay</b>	none					
	<b>Approximate Values for CTDIvol</b>					
	Patient size	weight(kg)	weight(lbs)	CTDIvol(mGy)		
	SMALL	50-70	110-155	4-10		
	AVERAGE	70-90	155-200	8-16		
	LARGE	90-120	200-265	14-22		
<b>NOTE*</b>	*The AAPM recommended NEMA XR29 Dose Notification Value for an adult torso is 50mGy. Dose Notification levels less than the AAPM recommended can be set. The maximum CTDI vol should match the dose notification value. Exams with CTDI vol values less than the minimum allowed range should not be performed unless approved by a radiologist.					

