

**RIH - LUMBO-SACRAL SPINE
GE LIGHTSPEED 16 / OPTIMA CT580 PROTOCOL**

Indication: fracture, trauma, mets, disc rupture, disc herniation, stenosis, post myelo.

Position/Landmark	Supine head first or feet first Zero at Iliac Crest				
Topogram Direction	Craniocaudal				
Respiratory Phase	Suspension				
Scan Type	Helical				
KV / mA / Rotation time (sec) Pitch / Speed (mm/rotation) Noise Index / ASiR / Dose Reduction	120kv / smart mA (100-440) / 0.5 sec 1.375:1 , 27.50mm 13.5 / 20 / 20%				
Detector width x Rows = Beam Collimation	1.25mm x 16 = 20mm				
Average Tube Output	ctdi – 14.3mGy dlp – 796 mGy.cm				
Helical Set					
Slice Thickness/ Spacing	recon	body part	thickness/ spacing	algorithm	recon destination
Algorithm	1	l spine	2.5mm x 2.5mm	bone	pacs
Recon Destination	2	thin l spine	1.2mm x .6mm	bone	for dmpr
	3	l spine	2.5mm x 2.5mm	standard	pacs
Scan Start / End Locations	mid body of T12 mid body of S3				
DFOV	18cm decrease appropriately				
IV Contrast Volume / Type / Rate	70cc omni 350 / 2cc per second if needed				
Scan Delay	65 seconds				
2D/3D Technique Used	DMPR of 3mm x 3mm coronal and sagittal l-spine series (auto-batch off), average mode, auto-transferred to PACS				
Comments:					
Post-Myelogram Studies:	Do semi-axial reformats, 3.0mm x 3mm, average mode, parallel to the disc space of L4-5 and L5-S1. Use a symmetrical sagittal image in the oblique box as the reformat reference image.				
Images required in PACS	Scouts, 2.5mm x 2.5mm axial l spine bone, 2.5mm x 2.5mm axial l spine standard, 3mm x 3mm sagittal l spine, 3mm x 3mm coronal l spine, Dose Report				