

**RIH – TRACHEA / AIRWAY SCAN  
GE LIGHTSPEED 16 / OPTIMA CT580 PROTOCOL**

**Indications: Suspected airway obstruction of the trachea**

<b>Position/Landmark</b>	Head first or feet first-Supine Sternal Notch			
<b>Topogram Direction</b>	Craniocaudal			
<b>Respiratory Phase</b>	Inspiration and Expiration			
<b>Scan Type</b>	Helical			
<b>KV / mA / Rotation time (sec) Pitch / Speed (mm/rotation) Noise Index</b>	120kv / smart mA (100-440) / 0.5 sec 1.75:1 , 35.00mm 24.00			
<b>Detector width x Rows = Beam Collimation</b>	1.25mm x 16 = 20mm			
<b>Average Tube Output</b>	Each Helical: ctdi – 10.7 mGy dlp – 426 mGy.cm			
<b>First Helical Set</b>	recon	body part	thickness/ spacing	recon destination
Slice Thickness/ Spacing	1	thin chest	1.25mm x .6mm	for dmpr
Algorithm	2	<b>inspiration chest</b>	5mm x 5mm	pac
Recon Destination	3	<b>inspiration lung</b>	5mm x 5mm	pac
<b>Second Helical Set</b>	recon	body part	thickness/ spacing	recon destination
Slice Thickness/ Spacing	1	thin chest	1.25mm x .6mm	for dmpr
Algorithm	2	<b>expiration chest</b>	5mm x 5mm	pac
Recon Destination	3	<b>expiration lung</b>	5mm x 5mm	pac
<b>Scan Start / End Locations</b>	1cm superior to nasopharynx through adrenal glands			
<b>DFOV</b>	38cm decrease appropriately			
<b>IV Contrast Volume / Type / Rate</b>				
<b>Scan Delay</b>				
<b>2D/3D Technique Used</b>	DMPR of 5mm x 5mm <b>coronal chest</b> series (auto-batch on), average mode, of both inspiration and expiration auto-transferred to PACS.			
<b>Comments:</b>	This protocol consists of inspiration and expiration helical scans. The ct technologist should coach the patient to properly follow complete inspiration and expiration breathing instructions.			
<b>Images required in PACS</b>	Scouts, 5mm x 5mm axial inspiration chest, 5mm x 5mm inspiration coronal chest, 5mm x 5mm axial inspiration lungs, 5mm x 5mm axial expiration chest, 5mm x 5mm expiration coronal chest, 5mm x 5mm axial expiration lungs, navigator series from nasopharynx to carina of both inspiration and expiration helical sets, Dose Report			