

General Scan Recommendations

Patient Condition:	Supine, immobile, maximum inspiration breath hold
Scanner Type:	Multi-slice, 4 detector or greater (16 detector or greater preferred)
Scan Type:	Chest, Lung, or Pulmonary Embolism (PE)
Scan Area:	Entire chest
Scan Duration:	Within breath hold duration of patient
Image Noise:	Minimize noise standard deviation

Reconstruction Recommendations

3D Map generation has been optimized for use with the reconstruction parameters listed in the table below. The ability to generate 3D Maps and 3D Map quality have not been qualified with other reconstruction parameters. It is strongly recommended that the parameters listed below be used.

Image Resolution:	512 x 512	
Field of View:	At least 1cm of trachea and entire lung volume	
Overlap:	20% - 50%	$Overlap \% = (Thickness - Interval) / Thickness$
Maximum Images:	690	

Manufacturer-Specific Recommendations:

Manufacturer	Thickness (mm)	Interval (mm)	Kernel and Filter
GE	1.25	1.0	Kernel: Standard Filter: Body
Philips	1.0	0.8	Kernel: C Enhancement: 0
Siemens	1.0	0.8	Kernel: B31f
Toshiba	1.0	0.8	Kernel: FC05

Non-3D Map Recommendations

If a 3D Map is not desired or the reconstruction parameters listed above cannot be achieved, the superDimension inReach® System will load CT scans reconstructed within the following parameter ranges:

Scan Thickness:	0.5 to 5.0 mm	
Overlap:	No gaps	
Minimum Interval:	0.5 mm	
Image Resolution:	256, 512, 768, or 1024	
Minimum Images:	50	
Maximum Images:	Resolution	Maximum Images
	256 x 256	2,500
	512 x 512	690
	768 x 768	300
	1024 x 1024	150

Slice Interval Ranges

The following table lists, for common Slice Thicknesses, Slice Intervals between 20% and 50% overlap:

Slice Thickness	Minimum Slice Interval (at 50% Overlap)	Maximum Slice Interval (at 20% Overlap)
1.0 mm	0.5 mm	0.8 mm
1.25 mm	0.625 mm	1.0 mm
1.5 mm	0.75 mm	1.2 mm
2.0 mm	1.0 mm	1.6 mm
2.5 mm	1.25 mm	2.0 mm
3.0 mm	1.5 mm	2.4 mm
4.0 mm	2.0 mm	3.2 mm
5.0 mm	2.5 mm	4.0 mm