

# NeuroLogica CereTom®

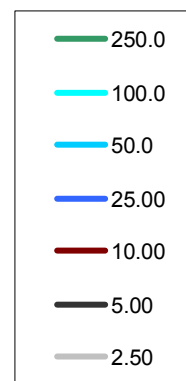
## Scatter Radiation Plot

The scatter map was measured using a 15.9 cm diameter X 14 cm length CTDI cylindrical phantom. A scan board and Stryker patient table were used.

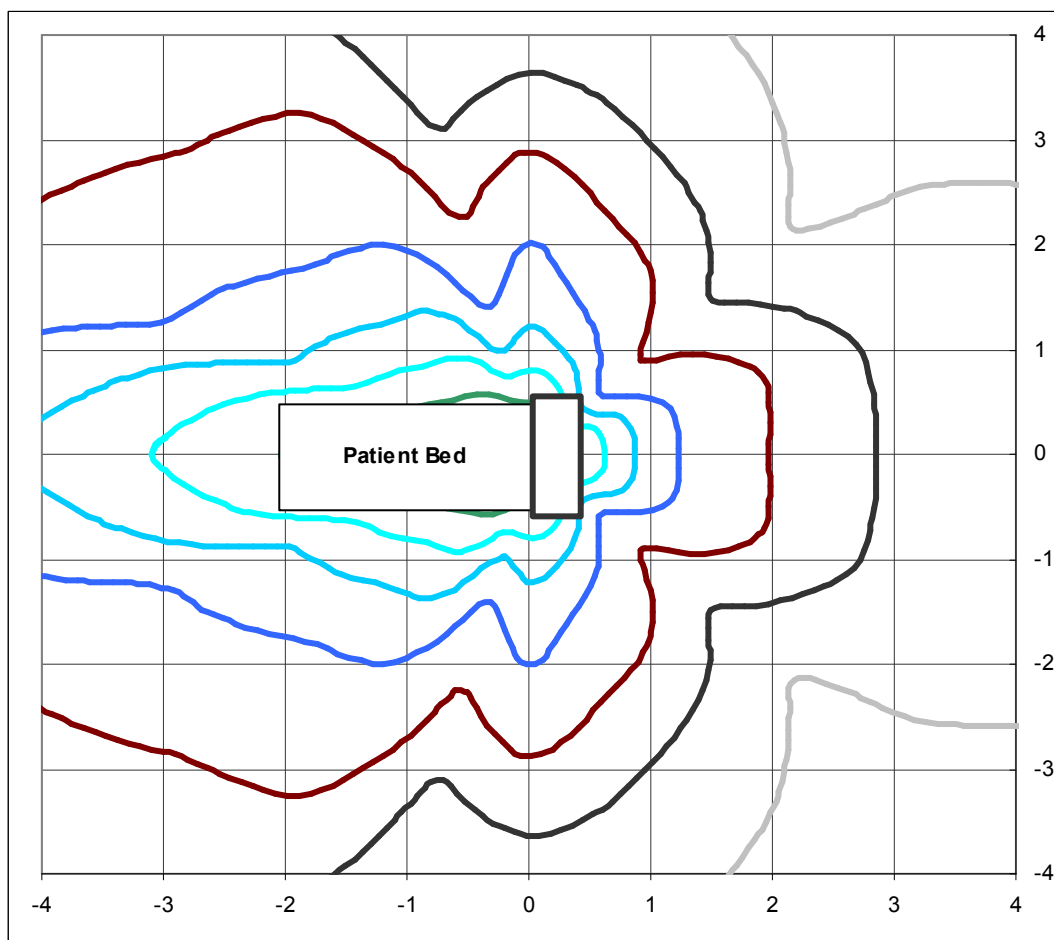
A typical ACR standard brain protocol was used. Scatter dose may vary between scanners up to +/- 10%. Dose numbers are air dose and thus more representative of skin dose not organ dose. Scatter dose depends on the object being scanned and the kVp setting, and scales linearly with the mAs technique.

Absorption of scatter by the patient will reduce external scatter rates. A detailed report with additional scatter maps is available upon request.

## Legend



nSv/Sec

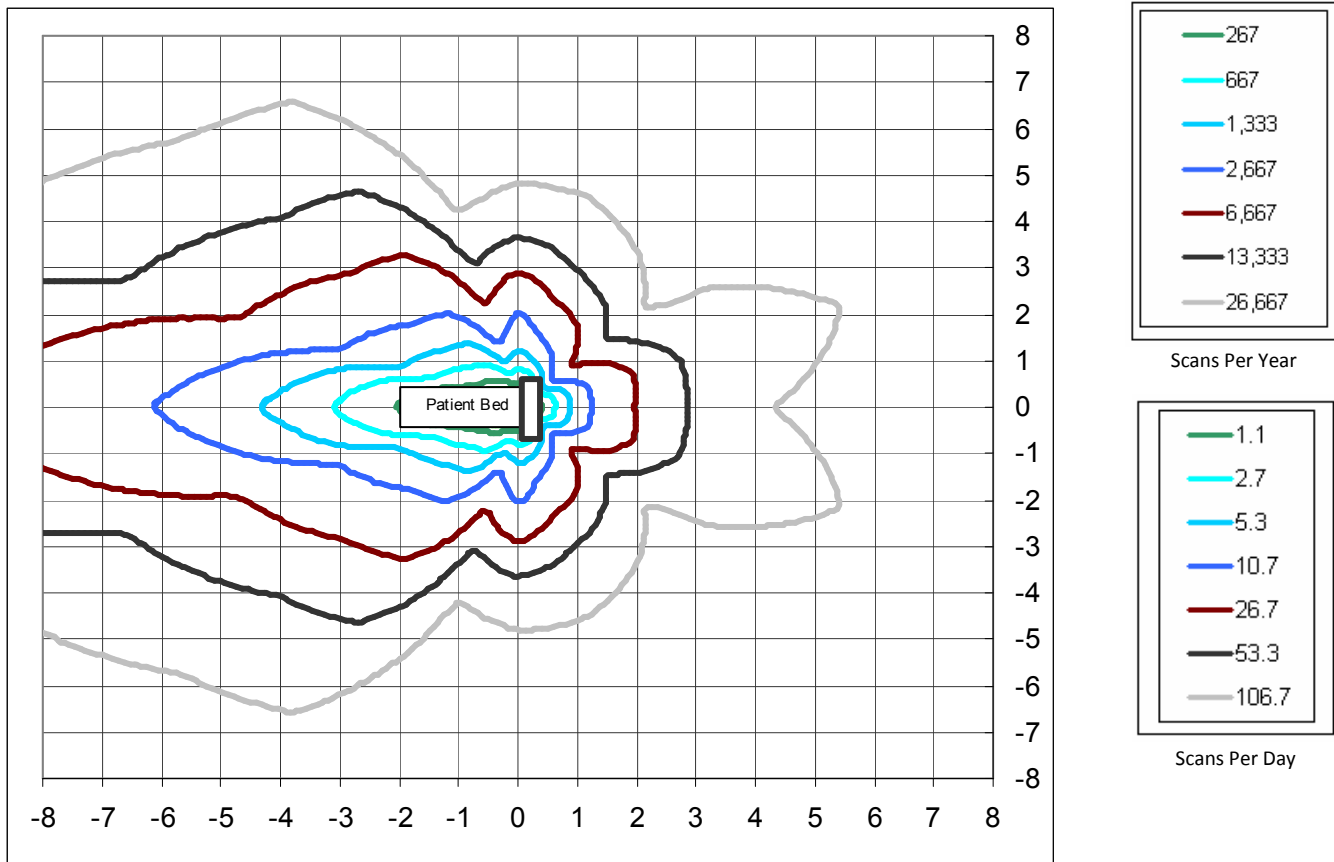


- With Radiation Shielding Upgrade

120 kVp 7.0 mA  
Optional Radiation Shielding Upgrade  
Bed/No Patient/CTDI Phantom  
Matrix Sq Meters



14 Electronics Ave  
Danvers, MA 01923  
978.564.8500  
info@neurologica.com  
www.NeuroLogica.com



• With Radiation Shielding Upgrade

**120 kVp 7.0 mA**  
**Optional Radiation Shielding Upgrade**  
**Bed/No Patient/CTDI Phantom**  
**Matrix Sq Meters**

CereTom CT Scatter Radiation at 1,2 and 3 meters from the isocenter.					
Scan / Position	Dose Rate nanoSv/sec	sec / slice	dose/scan nanoSv	scans / year	scans/day
1 meter at 45 deg	142.99	2.00	4290	466	1.9
2 meter at 45 deg	40.12	2.00	1204	1662	6.6
3 meter at 45 deg	18.52	2.00	556	3599	14.4
1 meter at side	67.46	2.00	2024	988	4.0
2 meter at side	25.44	2.00	763	2621	10.5
3 meter at side	8.98	2.00	269	7423	29.7

Assumptions - NeCT1
Scans per year and scans per day are based upon a total yearly dose of 2.0 mSv
Dose numbers are air dose and thus more representative of skin dose (not organ dose).
Assumes no lead vest
Scatter rates were measured with a CTDI phantom in the beam
Based upon 250 work days per year
Scan is at 120 kVp 7.0 mA 15 Slices - Technique is at 14 mAs per slice.
Scan is With Back Curtain, With Front Curtains, Without Estimated Patient Absorption

The CereTom incorporates a high degree of protection against radiation scatter. No practical design of equipment can provide complete protection. It is important that everyone having anything to do with x-radiation be properly trained and fully acquainted with the recommendations of the National Council on Radiation Protection and Measurements as published in NCRP Reports available from NCRP Publications, 7910 Woodmont Avenue, Room 1016, Bethesda, Maryland 20814, and of the International Commission on Radiation Protection, and take adequate steps to protect against injury.



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