## **Beck Radiological Innovations**

922 Rambling Drive, Catonsville, MD 21228

October 18, 2019

The attached table is a compilation of the properties of current Bar-Ray core material products. The information was taken from various reports of measurements made by me.

Thomas J. Beck

Thomas J. Beck, ScD ABR Certified in Diagnostic Medical Physics

## **Beck Radiological Innovations**

922 Rambling Drive, Catonsville, MD 21228

Bar-Ray Products	Attenuating Metals	Lead Equivalency	Attenuation				Core Weight		Front Protection Medium Apron Weight
			60 KVp	70 KVp	90 KVp	110 KVp	lb/ft <sup>2</sup>	kg/m <sup>2</sup>	SIZE: 22" x 34"
SCATTER SENTRY Compliant with IEC 61331-1 (2014)*	Antimony and Bismuth	.25 mm Pb	98.0%	95.8%	91.7%	86.2%	0.58	2.83	4.0 lb (1.8 kg)
		.35 mm Pb	99.3%	98.2%	95.0%	91.4%	0.79	3.86	5.4 lb (2.5 kg)
		.50 mm Pb	99.8%	99.3%	97.8%	95.0%	1.12	5.47	7.0 lb (3.2 kg)
TRUE LITE Compliant with IEC 61331-1 (2014)*	Antimony and lead mixture	.25 mm Pb	97.9%	95.4%	90.7%	85.7%	0.67	3.27	4.4 lb (2.0 kg)
		.35 mm Pb	99.5%	98.4%	95.8%	92.6%	0.93	4.54	5.8 lb (2.6 kg)
		.50 mm Pb	99.9%	99.5%	98.2%	96.4%	1.32	6.44	7.8 lb (3.5 kg)
COST CRUNCHER Compliant with IEC 61331-1 (2014)*	Lead	.25 mm Pb	97.9%	95.4%	90.7%	85.7%	0.69	3.37	4.8 lb (2.2 kg)
		.35 mm Pb	99.5%	98.4%	95.8%	92.6%	0.97	4.74	6.5 lb (2.9 kg)
		.50 mm Pb	99.9%	99.5%	98.2%	96.4%	1.38	6.74	8.7 lb (3.9 kg)
ECLIPSE Compliant with IEC 61331-1 (1994)	Antimony	.25 mm Pb	X	93.5%	89.7%	85.4%	0.48	2.34	3.4 lb (1.5 kg)
		.35 mm Pb	X	97.6%	94.0%	90.7%	0.69	3.37	4.4 lb (2.0 kg)
		.50 mm Pb	X	99.0%	97.4%	95.2%	0.96	4.69	5.8 lb (2.6 kg)
PRESTIGE Compliant with IEC 61331-1 (1994)	Antimony	.25 mm Pb	X	93.5%	89.7%	85.4%	0.53	2.59	3.6 lb (1.6 kg)
		.35 mm Pb	X	97.6%	94.0%	90.7%	0.72	3.52	4.7 lb (2.1 kg)
		.50 mm Pb	X	99.0%	97.4%	95.2%	1.05	5.13	6.3 lb (2.9 kg)
STARLITE Compliant with IEC 61331-1 (1994)	Antimony	.25 mm Pb	X	93.5%	89.7%	85.4%	0.59	2.88	3.9 lb (1.8 kg)
		.35 mm Pb	X	97.6%	94.0%	90.7%	0.78	3.81	5.2 lb (2.4 kg)
		.50 mm Pb	X	99.0%	97.4%	95.2%	1.17	5.71	7.0 lb (3.2 kg)

\* As modified in: Eder H, Schlattl H: Phys Med. IEC 61331-1: A new setup for testing lead free X-ray protective clothing. 2018 Jan;45: 6-11. doi: 10.1016.