



# National Voluntary Laboratory Accreditation Program



## SCOPE OF ACCREDITATION TO ISO/IEC 17025:2005

### RESL - DOE Laboratory Accreditation Program

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### CALIBRATION LABORATORIES

NVLAP LAB CODE 200366-0

### IONIZING RADIATION

*NVLAP Code:* 20/I01

Dosimetry of X-Rays, Gamma Rays & Electrons

### IRRADIATION OF PERSONNEL DOSIMETERS

<i>Calibration Category</i>	<i>Radiation Type or Beam Code</i>	<i>Nominal Intensity Range</i>	<i>Uncertainty of Delivered Quantity (<math>\pm</math>)<sup>note 1</sup></i>
Gamma	<sup>241</sup> Am	(0.05 to 5) rem	3.5 %
	<sup>137</sup> Cs	0.03 rem to 500 rad	1.7 %
X-ray	M30 <sup>note 2</sup>	(0.03 to 10) rem	2.1 %
	M50 <sup>note 2</sup>	(0.03 to 10) rem	3.3 %
	M60 <sup>note 2</sup>	(0.03 to 10) rem	2.1 %
	M100 <sup>note 2</sup>	(0.03 to 10) rem	2.1 %
	M150 <sup>note 2</sup>	0.03 rem to 500 rad	2.1 %
	M200 <sup>note 2</sup>	(0.03 to 10) rem	3.3 %
	M250 <sup>note 2</sup>	(0.03 to 10) rem	3.3 %
	H50 <sup>note 2</sup>	(0.03 to 10) rem	3.3 %
	H60 <sup>note 2</sup>	(0.03 to 10) rem	3.3 %
	H100 <sup>note 2</sup>	(0.03 to 10) rem	3.3 %
	H150 <sup>note 2</sup>	(0.03 to 10) rem	2.1 %
H200 <sup>note 2</sup>	(0.03 to 10) rem	3.3 %	

2009-01-01 through 2009-12-31

*Effective dates*

*For the National Institute of Standards and Technology*



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	H250 <i>note 2</i>	(0.03 to 10) rem	3.3 %
	H300 <i>note 2</i>	(0.03 to 10) rem	3.3 %
	S60 <i>note 2</i>	(0.03 to 10) rem	2.1 %
	NS20 <i>note 3</i>	(0.03 to 10) rem	3.3 %
	NS80 <i>note 3</i>	(0.03 to 10) rem	3.3 %
	NS150 <i>note 3</i>	(0.03 to 10) rem	3.3 %
	WS150 <i>note 3</i>	(0.03 to 10) rem	3.3 %
Beta	<sup>204</sup> Tl	(0.15 to 10) rem	4.6 %
	<sup>90</sup> Sr/ <sup>90</sup> Y	(0.15 to 10) rem	2.4 %
	Uranium Slab	(0.15 to 10) rem	3.8 %

1. Represents an expanded uncertainty using a coverage factor,  $k = 2$ , at an approximate level of confidence of 95 %.
2. NIST X-ray designation in NBS 250-16.
3. ISO X-ray designation in ISO 4037, Pt. 1.

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