

Photometry and Radiometry, Serbia, DMDM (Directorate of Measures and Precious Metals)



Calibration or Measurement Service			Measurand Level or Range			Measurement Conditions/Independent Variable		Expanded Uncertainty					Comments
Quantity	Instrument or Artifact	Instrument Type or Method	Minimum value	Maximum value	Units	Parameter	Specifications	Value	Units	Coverage factor	Level of Confidence	Is the expanded uncertainty a relative one?	
Luminous intensity	Tungsten lamp	Photometric bench, reference lamps / photometer	1	10000	cd	Colour temperature	2353 K, 2800 K and 2856 K	2	%	2	95%	Yes	Approved on 30 September 2010
Illuminance responsivity, tungsten source	Illuminance meter	Photometric bench, reference lamps			A/lx	Colour temperature	2353 K, 2800 K and 2856 K	3	%	2	95%	Yes	Approved on 30 September 2010
						Illuminance	0.05 lx and 5000 lx						
Luminous flux	Tungsten lamp	Integrating sphere, substitution method	400	10000	lm	Colour temperature	2800 K	3	%	2	95%	Yes	Approved on 30 September 2010
Luminance	Tungsten-based source	Reference illuminance meter	0.01	5000	cd/m ²	Correlated colour temperature	(2856 ± 50) K	2.5	%	2	95%	Yes	Approved on 30 September 2010
Luminance responsivity	Luminance meters	Integrating spheres with tungsten sources			A/(cd/m ²)	Correlated colour temperature	(2856 ± 50) K	3	%	2	95%	Yes	Approved on 30 September 2010
						Luminance	0.01 cd/m ² to 2000 cd/m ²						
Transmittance, regular, spectral	Spectrally-neutral material	Comparison with air or reference filters	0.1	1		Wavelength	250 nm to 359 nm	1	%	2	95%	Yes	Approved on 30 September 2010
						Bandwidth	2 nm						
Transmittance, regular, spectral	Spectrally-neutral material	Comparison with air or reference filters	0.1	1		Wavelength	400 nm	0.6	%	2	95%	Yes	Approved on 30 September 2010

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Quantity	Instrument or Artifact	Instrument Type or Method	Minimum value	Maximum value	Units	Parameter	Specifications	Value	Units	Coverage factor	Level of Confidence	Is the expanded uncertainty a relative one?	
						Bandwidth	4 nm						
Transmittance, regular, spectral	Spectrally-neutral material	Comparison with air or reference filters	0.001	0.1		Wavelength	401 nm to 1000 nm	0.6 to 2.0	%	2	95%	Yes	Approved on 30 September 2010
						Bandwidth	1 nm to 4 nm						
Transmittance, regular, spectral	Spectrally-neutral material	Comparison with air or reference filters	0.1	1		Wavelength	401 nm to 1000 nm	0.3	%	2	95%	Yes	Approved on 30 September 2010
						Bandwidth	1 nm to 4 nm						
Distribution temperature	Tungsten lamp	B/R method, visual comparison	2000	3000	K			30	K	2	95%	No	Approved on 30 September 2010
Correlated colour temperature	Tungsten lamp	Chromaticity lines near Planckian curve	1500	3200	K			60	K	2	95%	No	Approved on 30 September 2010