Photometry and Radiometry, Malaysia, NML-SIRIM (National Metrology Laboratory, SIRIM Berhad)



| Calibratio | Measurand Level or Range | | | Measurement Conditions/Independent Variable | | Expanded Uncertainty | | | | | | | |
|----------------------------------|-----------------------------|--|------------------|--|---------------------|-------------------------------|------------------|-------|-------|--------------------|------------------------|---|--|
| 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? | Comments |
| Luminous intensity | Tungsten lamp | Photometric bench and reference lamps/photometer | 100 | 1000 | cd | Correlated colour temperature | 2000 K to 2856 K | 0.7 | % | 2 | 95% | Yes | Approved or 27 September 2004 |
| Luminous intensity | Tungsten lamp | Photometric bench and reference lamps/photometer | 100 | 1000 | cd | Correlated colour temperature | 2856 K to 3000 K | 0.7 | % | 2 | 95% | Yes | Approved or 27 September 2004 |
| Luminous flux | Tungsten lamp | Photometric bench and reference lamps/photometer | 300 | 4000 | lm | Correlated colour temperature | 2000 K to 2856 K | 0.9 | % | 2 | 95% | Yes | Approved or 27 September 2004 |
| Illuminance | Tungsten lamp | Photometric bench and reference lamps/photometer | 10 | 1000 | lx | Correlated colour temperature | 2500 K to 3000 K | 0.9 | % | 2 | 95% | Yes | Approved or 27 September 2004 |
| Correlated colour temperature | Tungsten lamp | Spectral distribution | 2600 | 3000 | К | Correlated colour temperature | 2500 K to 3000 K | 20 | К | 2 | 95% | No | Approved or 27 September 2004 |
| | | | | | | Bandwidth | < 3 nm | | | | | | |
| Transmittance, regular, spectral | Spectrally neutral material | Reference spectrophotometer | 0 | 1 | | Wavelength | 200 nm to 900 nm | 0.05 | | 2 | 95% | No | Approved or 27 September 2004 |
| Responsivity | Fiber optic power meter | Comparison with reference power meter | | | Reading/W or dBm | Wavelength | 1310 nm | 2 | % | 2 | 95% | Yes | Approved or 27 September 2004 |
| | | | | | | Bandwidth | < 1 nm | | | | | | |
| Responsivity | Fiber optic power meter | Comparison with reference power meter | | | Reading/W or dBm | Wavelength | 1550 nm | 2 | % | 2 | 95% | Yes | Approved or 27 September 2004 |
| | | | | | | Bandwidth | < 1 nm | | | | | | |