Update on Optical Testing to EN 12966:2014

EN12966:2014 supersedes EN12966:2005+A1:2009 which will be withdrawn in Sept-2016. Under the new EN12966:2014, the VMS manufacturer is required to declare whether the VMS is 'continuous' or 'discontinuous', whether the VMS involves monochromatic sources or colour mixing, and whether the VMS is required to be tested to include the tunnel application (denoted * in the specification). The manufacturer is also required to declare the Performance Classifications for Chromaticity, Luminance, Luminance Ratio and Beam Width.

There is a prescribed test sequence:

- The first test is Visual Performance ('Pre-Optical' tests) according to Clause 5.1(1) and this includes all optical tests;
- The last thing to test is a subset of the Visual Performance ('Post Optical' tests) according to Clause 5.1(8) and this involves Chromaticity, Luminance and Luminance Ratio only.

Looking in more detail at the optical tests, compared to EN 12966:2005 +A1:2009:

- 4.4.2 Colour is the same as before, and the tolerances are the same
- 4.4.3 Luminance is more onerous to test and the tolerances are tighter*
- 4.4.4 Luminance Ratio is specified differently, but involves about the same amount of testing, and the tolerances are tighter (indirectly*)
- 4.4.5 Beam Width involves more testing, and the requirements are the same as before.
- 4.4.6 Uniformity involves less testing, and the requirements are the same as before.
- 4.4.7 Flicker is the same as before.

* specifically, the Lmax values are significantly lower, which means it may be more difficult for a VMS to gain higher luminance ratio classifications.

For EN12966 testing, OptiConsulting has uplifted the associated optical calibrations to NPL (UKAS) level. Please contact OptiConsulting to discuss your testing requirements.