



BUREAU
VERITAS

CERTIFICATE OF CONFORMITY

To ICAO Annex 14 – Sixth edition
Standards and recommended practices

The undersigned, **Rudi Vandenbempt**, acting within the scope of the General Conditions of BUREAU VERITAS, certifies herewith the supply of

Product: **Internally Illuminated IP54 LED Guidance Signs type PVL**

- was found in conformity with:
 - the request of inspection from ADB/ZAVENTEM
 - the catalogue sheet DOCA04265EV2 (PVL & RPV)
- Date of inspection: **March 27th, 2015**.

and has been, upon request of:

ADB
Airfield Solutions
Leuvensesteenweg, 585
B – 1930 ZAVENTEM/BELGIUM

- inspected in conformity with the applicable requirements of
 - the ICAO - Annex 14 - Volume I - Appendix 1- § 3.4 & Appendix 4
 - the CIE Publication n° 15 for Colorimetry
 - the ICAO document 9157 AN/901 : Aerodrome Design Manual : Part 6 and especially to sections §4.9.3 till 4.9.8 and §5.2.2 till 5.2.3.
 - the FAA AC 150/5345-44 specification for frangibility - Mode 2: 322 kph
 - Cenelec ENV 50235
 - OTAN STANAG 3316

Issued at Antwerp, **March 27th, 2015**

Rudi Vandenbempt
Inspector Industry
BUREAU VERITAS ANTWERP



Particulars of inspection: detailed hereafter

This certificate is only valid for a period of 5 years from the issuance date, as far as no changes of production process, equipment characteristics nor of applicable requirements occur during this period of validity.



PHOTOMETRY and COLORIMETRY ACCORDING ICAO REQUIREMENTS

- Attendance of tests on samples of PVL panels at the Laboratory premises of the manufacturer:
 - Examination of test equipment
 - Attendance to photometric tests according to the applicable procedure per ICAO Annex 14 – Volume 1, Appendix 4
 - Attendance to colorimetry tests according to the applicable procedure per ICAO Annex 14 – Volume 1, Appendix 1, §3.4 Fig.A1-4
- Test results are detailed in the attached records, annexed herewith

FRANGIBILITY ACCORDING ICAO & FAA REQUIREMENTS:

- Frangibility test using the Sand Bag procedure making sure that the sign and its footing does not collapse nor give way with a load of 6.21 kPa and making sure that the footing breaks neatly at the notched groove under a load of 8.96 kPa.
- Conformity to the ICAO document 9157 AN/901 : Aerodrome Design Manual : Part 6 and especially to sections §4.9.3 till 4.9.8 and §5.2.2 till 5.2.3.
- Conformity to FAA AC 150/5345-44 specification for frangibility - Mode 2: 322 kph

ELECTRICAL SAFETY & FRANGIBILITY

- Per attached test plan, the dielectric test is performed at 1500V RMS, and the electrical circuit shall disconnect neatly at the frangibility point.

CONCLUSION

Taking into account the satisfactory results of examinations and assessments, it can be confirmed that the manufacturing and the test results for the above specified units are in conformity with applicable standards, specifications and data sheets.
(Details of standards and specifications are indicated on page 1 of this certificate and data sheet as per catalogue).

ATTACHMENTS

Report of tests which have been attended, duly stamped for identification by BUREAU VERITAS:

- Luminance & color point test for night operation
- Frangibility per FAA AC 150/5345-44 - Mode 2 & ICAO Aerodrome design Manual Part 6
- * Red Background and White characters,
- * Black Background and Yellow characters,
- * Yellow Background and Black characters,

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Rudi Vandenberg
Inspector Industry
BUREAU VERITAS ANTWERP



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