

SMF / LAB CHS and CVS AGL Workshop Photometric Instruments

DATABASE

The system database store all the information about the light type under test, the light manufacturer, part and serial numbers, measurements data

REPORTING

- The system provides a complete reporting of measurements results as:
- Isocandela Diagram
- Beam Alignment
- Raw Data presentation
- Color
- ICAO requested parameters
- Conformity report

DOCUMENTATION

The system includes System Manual, Operating Manual, Software Manual. Test data report and Calibration Certificates

TRAINING COURSE

A complete training course covers all the installing, operating, reporting and maintenance issues allowing the customer to reach the complete control of the instrument



SMF/Lab-CHS and SMF/Lab-CVS are photometric measurement systems for AGL equipment especially designed and developed by ARGOS INGEGNERIA to operate in the workshop of the airfield lights department. The versions are available according to customer needs:

- horizontal scanning (SMF/Lab-CHS), where the sensing bar is fixed in vertical position while the light fixture rotates on a turntable allowing to scan both light sides
- vertical scanning (SMF/Lab-CVS), where the sensing bar is in horizontal position and moving while the light fixture is standing fix.

Both versions have the same accuracy and are suitable to check the fixtures before the re-installation in the airfield after repair and refurbishment.

SMF/Lab-CHS system is especially addressed to customers already equipped with ARGOS's mobile system SMF/M, as they may share the same 13 sensors array measurement bar used in mobile operations.

The high accuracy of SMF/Lab -CHS/CVS make the systems also suitable to certificate the performances of all inset and elevated fixtures at the final stage of a customer production line of AGL. The data flow coming from the high resolution horizontal/vertical scanning is processed to compute, store and display all the light parameters, including the beam average intensity in candelas, maximum and minimum intensity, beam elevation, toe-in and ISOCANDELA diagram according to ICAO Annex 14 reference grid requirements. The measuring bar is equipped with one color sensing device according to CIE 1931 recommendation.

Measurement operations are fully automated and allow 7x13 grid points measurement (ICAO grid points) or 13x13 extended grid points based on micro steps with 2 to 8 arc-minutes horizontal angle resolution.

- Light Measurement according to ICAO reference grid points
- Maximum, Average and Minimum beam intensity measurement
- Elevation and Azimuth angles measurement
- Light Colour measurement according to CIE 1931
- Isocandela Diagram
- Automatic PDF measurement reporting
- Full automatic operations





Characteristics



The systems are fully controlled by a user friendly application software which includes all the functions necessary to create the data base, to set up the system parameters, to save and display the results of measurements, to compute, display and print the ISOCANDELA diagrams. The system software runs on a MS Windows 7 OS platform. All the data acquired during the measurement sessions are stored into the system data base and can be exported to MS Office programs for any further application or customer need.

Specifications

- High precision microprocessor controlled motorized turntable subsystem / vertical scanning subsystem
- 13 LUX sensors measuring bar with continuous acquisition method at step of 2' of arc-degree
- LUX sensors acquisition with 0.25 LUX resolution
- High speed electronics for sensors oversampling with 16 bits ADC
- 1 color measuring device conforming CIE 1931 recommendation (ICAO)
- 7 x 13 (ICAO) ,13 x 13 or continuous grid points diagram
- Average, maximum and minimum values (CD) of beam intensity measurement
- Vertical and horizontal angle measurement
- SQL compatible system data base
- LAN communication
- Manual operations panel
- Power supply: 110/220 VAC, 100 W max. including system PC
- Accuracy : < 3%
- Repeatability :< 2%
- System software compatibility with SMF ARGOS products family
- Integrates the SMF/M hardware and software technologies approved by Italian CAA ENAC



The system holds automatic diagnostic routines to check the instrument status

EASY TO USE

No special installation works required

Automatic double side lights measurement

User friendly system interface

TECHNICAL SUPPORT

Argos technical support assists customers during the whole system lifetime

REFERENCES

Bangladesh, Denmark, Korea, Italy, Russian Federation, Taiwan, Turkey

For further information on our products and services please see our website:

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