# SMF/TABLE

## Air-Field Lighting System portable photometric measurement system

### COMPLETE DATABASE

**The system database has the capacity to store all the life measurements for the configured airports.**

**Database incorporates all the information of lights systems and subsystems, light fixture characteristics (ALS, PAPI, Runway Lights, Taxiway lights, RGL), light absolute and relative positioning, light measurement results.**

### DATA REPORTING

**System automatically issues the final report of the measurement session with GPS certification of each light position.**

### CUSTOMER TRAINING

**Customers will be provided with a theoretical and practical training course, covering all operating, reporting and maintenance topics to reach the full instrument control and achieve familiarity with measurement procedures.**

### DOCUMENTATION

**The system includes:**

**System Manual**
**Operating & Sw manual**
**Test data report**
**Calibration Certificate**

### TECHNICAL SUPPORT

**Argos Technical support assists customers along the whole system lifetime**

**SMF/Table** is a stop-and-go, hand operated real-time photometric measurement system for AGL equipment, designed, developed and manufactured by ARGOS to perform the photometric assessment of Approach, Runway and Taxiway lights, including stop-bar and RGL, without the requirement of a vehicle. SMF/Table can also test the photometric diagram and parameters of PAPI (Precision Approach Path Indicator) lights.

**SMF/Table** is composed of an array of photometers and a colorimeter capable of measuring with a single click the photometric parameters and the orientation of light under test. It consists of a battery operated hand portable sensor frame connected through a Wi-Fi communication to the laptop PC which runs the Operator HMI. The sensor frame is supported by a telescopic frame for elevated lights measurement.

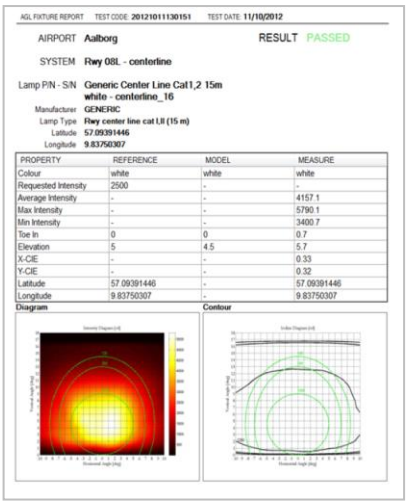
**SMF/Table** is easy to use as the operator is step-by-step assisted by the system software. SMF/Table allows the Customer to reach every light in the field, or to stay in the airport workshop, to:

- quickly identify the fixtures requiring maintenance for cleaning, repair or replacement
- maintain compliance of AGLS to ICAO Annex 14/EASA recommendations
- reduce operational costs of AGLS, providing useful information to improve the maintenance routine

RGL flashing lights are measured applying the method recommended at Chap. 18.3.14 of ADM Part IV - Visual Aids.

Sensor table is equipped with an high speed ADC for accurate capturing of flashing light pulses. The system supports halogen and LED technology flashing lights.

- Halogen and LED Light Measurement according to ICAO Annex 14/EASA reference grid points
- Maximum, Average and Minimum beam intensity measurement
- Elevation and Azimuth angles measurement
- Light Colour measurement according to CIE 1931 (ICAO Annex 14-2016)
- SBAS GPS lights positioning
- Full automatic PDF reporting including lights position
- Battery operated, with 8 hours of continuos operations
- Wi-Fi connection to Operator tablet PC
- Double laser pointing for light distance setup



AGL FIXTURE REPORT TEST CODE 20121011130151 TEST DATE 11/10/2012

AIRPORT Aalborg RESULT PASSED

SYSTEM Rwy 08L - centerline

Lamp P/N - S/N Generic Center Line Cat1,2 15m white - centerline_16

Manufacturer GENERIC

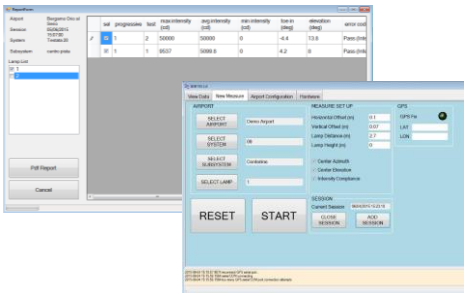
Lamp Type Rwy center line cat I,II (15 m)

Latitude 57.09391446

Longitude 9.83750307

| PROPERTY | REFERENCE | MODEL | MEASURE |
|---|---|---|---|
| Colour | white | white | white |
| Requested Intensity | 2500 | - | - |
| Average Intensity | - | - | 4157.1 |
| Max Intensity | - | - | 5790.1 |
| Min Intensity | - | - | 3400.7 |
| Toe In | 0 | 0 | 0.7 |
| Elevation | 5 | 4.5 | 5.7 |
| X-CIE | - | - | 0.33 |
| Y-CIE | - | - | 0.32 |
| Latitude | 57.09391446 | - | 57.09391446 |
| Longitude | 9.83750307 | - | 9.83750307 |

Diagram Contour




# SMF/TABLE Components

## SELF DIAGNOSTIC

The system holds automatic diagnostic routines to continuously check the instrument status

## TURNKEY SOLUTIONS

The instrument comes with a complete set of accessories for a quick in field deployment

No Vehicle required

Automatic database filling procedure for light fixtures positioning

## REACHING ALL LIGHTS

Easy reaching all kind of lights wherever they are installed

## REFERENCES

Italy, India, Spain, State of Guernsey (UK), Thailand

More information about Argos products and services at:

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| | | |
|---|---|---|
| Main SMF/Table measurement frame with carrying bag |  |  |
| Professional type Tripod for elevated lights measurement, with adapter and carrying bag |  |  |
| Set of frame supports for inset lights measurement | |  |
| In field tablet Wi-Fi PC, MS Windows 10 OS and AC/DC – DC/DC 12V adaptor | |  |
| Rechargeable 12 VDC 2 x 14 Ah Li-Po battery pack, with AC/DC and DC/DC chargers and cables | |  |
| Light bag for all SMF/Table accessories | |  |

- System software, data-base and back-up supports
- Operating and Maintenance Manual
- Certificate of Calibration
- 24 months warranty certificate
- Software license

**SMF/Table** frame operates normally at a distance of 2,44 meter from the light under test. User may decide for a different distance just setting the relevant parameter in the system software HMI. Height of frame may be adapted to elevated lights, including PAPI, using the crank and legs of telescopic tripod.

## Specifications

| | |
|---|---|
| Photometric intensity and ISOCANDELA diagrams | |
| Average, maximum, minimum intensity (cd) | <5 % |
| Vertical aiming angle (elevation, deg) | 0.5° |
| Horizontal aiming angle (toe-in, deg) | 0.5° |
| Ratio of max to min intensity | |
| Chromaticity x, y (CIE 1931) | 0.03 |
| SBAS GPS light position | ≤ 2 m |
| Automated single-light reporting | |
| Automated lights sub-system reporting | |
| Measurement duration (1 light) | <1 min typ. |
| Measurement distance | 2.44 m typ. |
| Working Temperature | -10°C +40°C |
| Storage Temperature | -20°C +80°C |