



*For wind turbines using  
visibility controlled aviation  
obstruction lights*

*Simulates a fixed visibility  
allowing function of all connected  
equipment to be tested*

**Visibility sensors are used as a means to adjust the brightness of aviation obstruction lights on wind turbines. In this way, the brightness of the light is reduced as the meteorological conditions improve and visibility increases. Light pollution caused by these very bright lights is then greatly reduced.**

**There is a requirement to be able to test the correct operation of these aviation obstruction lights on wind turbines, both at the initial construction phase and at regular intervals thereafter as part of general operational maintenance. These test plaques demonstrate the correct operation of the aviation obstruction lights by reproducing the required visibility from the Biral sensor, triggering the change of brightness.**

### Operation

The test plaque is supplied to a customer specified, pre-configured visibility value. These test plaques can be fitted to any current (850nm) Biral SWS sensor and utilise the mounting points used by the calibration plaques.

Each test plaque forces the Biral visibility sensor to report a known Meteorological Optical Range (MOR) as ascribed to the plaque. This MOR value is equivalent to a known visibility value. This MOR output will then cause the lighting control system to adjust the brightness of the aviation obstruction lights.

The MOR value for each test plaque is specified by the customer at the time of purchase. The values and ranges for these plaques are shown below.

These test plaques are for use as a simulator only and are not to be used for the calibration of Biral sensors.

### Technical Specifications

MOR range available	0.5 to 7.0km in increments of 0.1km
Measurement Error	± 15% of assigned MOR value
Material	Anodised aluminium optical support and installation arm
Weight	0.32kg Including carry case 1.02kg
Warranty	2 years
Packaging	The plaque is packaged in a rigid plastic foam lined protective carry case. Includes a set of foam zero reference optical plugs. - User guide
Ordering Codes	SWS.TEST1.x.x* Single test plaque to the value supplied by customer SWS.TEST2.x.x,y.y* A set of two test plaques to the values supplied by customer
*Where: x.x or y.y: is the required MOR (range 0.5 to 7.0km, in 0.1km increments). E.G. SWS.TEST1.1.5 OR SWS.TEST2.1.5,4.3	