

## **OSM/LUM DECISION SHEET (DSH)**

| Standard(s) (incl. year)     | Subclause(s):   | Tracking No. | Year                          |
|------------------------------|---|--------------|-------------------------------|
| EN 60598-1:2015/A1:2018      |   |              |                               |
| Category:                    | 12.5.1  | DSH<br>0925B | 2019                          |
| LITE                         |   |              |                               |
| Subject:                     | Key words:  | Developed by | Approved at                   |
| Abnormal operation condition | IP 00 transformer<br>IEC 61558-1 ed.2<br>Short-circuit test | OSM/LUM-ETF5 | 2019 ETICS<br>Plenary Meeting |
| Question                     |   |              |                               |

Question

According to § 12.5.1.4), in a luminaire with transformer rated 230/12V, the unsafe condition is a short circuit in the secondary. The transformer used is a not short circuit protected safety isolating transformer fitted with an EN 60127 standardised fuse. In our opinion, the most unfavourable condition will be the overload (2,1xln; 30' or 2,1xln, 2' depending on the technical data sheet of the fuse, and 1,5 x I fuse until steady-state condition), instead of a short-circuit, because a short-circuit in the secondary results in immediate blowing of the fuse. No temperature rise could be measured.

## Decision

Luminaires containing an associated transformer or an IP 00 transformer shall comply with the relevant test described in EN 61558-1 clause 15 (compare the note in EN 61558-1, clause 4.2). In addition the short-circuit test described in EN 60598-1, sub-clauses 12.5.1.4), 12.6 and 12.7 must be performed.

## **Explanatory notes**

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