

Test Report

Report No.: 20181129007-1
Date: November 29, 2018

3.6.3.1 Static load test for mast arm or post top mounted luminaires

The luminaire is mounted in such a way that the most critical surface is loaded.
The most critical surface is determined by calculating the highest value of $C_d \times S$

where

C_d is the drag coefficient;

S is the area of the surface to be loaded (m^2).

The drag coefficient depends on the shape of the surface. For luminaires for which the C_d is not measured the value of 1,2 shall be taken.

NOTE 1 See annex A for measurement of C_d .

The means of attachment shall be secured in accordance with the manufacturer's instructions.

A constant evenly distributed load is applied for 10 min on the most critical surface.

NOTE 2 See figure 1 for methods of equal distribution of the load. In cases where bags are used, these can be filled with sand, lead shot or small balls.

The load shall be equal to

$$F = 1/2 R_h \times S \times C_d \times V^2 \text{ (N)}$$

where

R_h is equal to 1,225 kg/m^3 (air volumic mass);

V is the wind speed (m/s).

The wind speeds relevant to the mounting heights of luminaires shall be

$V = 45 \text{ m/s}$ (163 km/h) for heights up to 8 m;

$V = 52 \text{ m/s}$ (188 km/h) for heights between 8 m and 15 m;

$V = 57 \text{ m/s}$ (205 km/h) for heights of more than 15 m.

NOTE 3 In some countries, the wind speed is determined by national rules (for example Japan).

The drag coefficient is 1,2 (or the exact value measured in annex A).

After the test, there shall be no visible failure impairing the safety, no permanent deformation from the attachment which exceeds a slope of more than 2 cm/m , and no rotation around the point of attachment.

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1. Test Result:

3.6.3.1 (-)	Static load test		P
	- drag coefficient.....:	1.2	P
	- loaded area (m ²).....:	0.09	P
	- used load (N).....:	220	P
	- measured deformation (cm/m).....:	0.363 cm/m<2 cm/m	P
	- no rotation		P

Product Description: LED flood light

Model No.: TFL-15W, TFL-30W or TFL-60W; may be followed by -C; followed by -2000K, -2200K, -2700K, -3000K, -3500K, -4000K, -4500K, -5000K, -5500K, -5700K, -6000K, -6500K, -Green, -Blue, -Red, -Yellow or - Amber.

Date(s) of performance of test November 29, 2018

Test specifications / Test standard : Verification test according to sub-clause 3.6.3.1 of IEC/EN 60598-2-3.

Test result : PASS (The presented unit was found to be in compliance with the test specification.)

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