

ACCREDITED TESTING SERVICES

PHOTOMETRIC CHARACTERISTICS:

NO LED luminaires - UNE-EN 13032-1:2016; CIE 34:1977
LED luminaires - UNE-EN 13032-4:2016; CIE 34:1977; CIE 52:1982

Distribution of luminous intensity.

Luminous flux, zonal fluxes, CIE codes.

Efficiency and isolux curves.

Beam angle and illuminance cones (maximum, minimum and mean illuminance at different heights).

Spread, throw, control (SLI), isocandela diagram, utilization curves (roadside/kerbside).

Power consumption and power factor during photometric testing.



COLORIMETRIC CHARACTERISTICS:

NO LED luminaires - UNE-EN 13032-1:2016; CIE 63:1984; CIE 15:2004; CIE 13.3:1995
LED luminaires - UNE-EN 13032-4:2016; CIE 63:1984; CIE 15:2004; CIE 13.3:1995

Chromatic coordinates.

Correlated color temperature, Black body deviation (Duv).

Color rendering index, angular color uniformity.

BLUE LIGHT HAZARD:

UNE-EN 62471:2009; IEC TR 62778:2014

Risk group classification (LB, EB)

Determination of threshold illuminance E_{thr} , and threshold distance d_{thr} .

Determination of the risk group based on data or measurements (LB, EB) on the primary light source

Technical Annex in www.candeltec.es