

7.0 Certification and Classification

7.1 Certification

The principal EU Directives for electrical products are the Electro-Magnetic Compatibility (EMC) Directive and the Low Voltage (LV) Directive, summarised for lighting products in Table 8. The EMC Directive and the LV Directive both require products put on the UAE market to be safe: Compatibility being designated by the CE mark. Products complying with specified Euronorm (EN) safety standards are presumed to comply. EN standards are based upon existing international standards, e.g. an IEC standard. For a list of current EN standards relevant to lighting products see Tables 9 and 10 (EMC and Safety), and Table 11 (Performance). In most instances, there is an equivalent British Standard (BS), known as a BS EN. For established products a compatible BS standard may still be used, but preference should be given to the EN standards. Electrical EN standards are issued by the EU sponsored organisation, CENELEC (see Figure 103). These standards are type tests, and

manufacturers are required to associate them with controls for conformity of production.

Parallel to all the EU Standards and Certification procedures for lighting products and lighting parts, assemblies the US Standards known as UL Standards (Underwriters Laboratories™) are developed in a similar way. The listings and Tables below will show the main topics of both to allow for orientation in view to lighting products used for street-, tunnel- and public realm lighting. All the standards and certifications needed for a project are to be seen in close connection with the client's demands and/or the DMA tender procedures and requirements.

7.2 European (EU) Standards and Safety Trade Marks

The Table 8 shows the different European directives to allow proper certification of lighting and lighting components:

ENC Directive from 1 st of January 1996 Applies to: see Table 9	LV Directive from 1 st of January 1997 Applies to: Luminaires, Lighting Components, Lamps
EN Standards See Table 9	EN Safety Standards See Table 10

Table 8
EU directives and lighting products.

NOTE 1 Use local Standards like ESMA 38-2012, 13-2013, 21-2013, etc. for specification in addition to international ones.