



Exploration & Production

GENERAL SPECIFICATION

ELECTRICAL

GS EP ELE 081

Lighting

04	01/2012	Complete review
03	10/2005	Addition of "EP" root to GS identification
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Owner: DEV/TEC

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1. Scope

The purpose of this specification is to define the main lighting criteria in order to specify:

- The Company lighting installations
- The minimum requirements for manufacturing/inspection/testing of luminaires and associated accessories.

This specification shall cover:

- Onshore installations
- Offshore platforms
- Floating Units (FPSO, FSO, FPS, FSU, FPU, etc.)
- Company offices and buildings.

In hazardous areas, the luminaire type shall be selected in accordance with the Company general specification **GS EP ELE 079**.

2. Reference documents

The reference documents listed below form an integral part of this General Specification. Unless otherwise stipulated, the applicable version of these documents, including relevant appendices and supplements, is the latest revision published at the EFFECTIVE DATE of the CONTRACT.

Design, construction and inspection shall conform as a minimum requirement to the current edition of the following in order of preference:

- Applicable laws, and regulations of the country in which the system will be operated. In cases where no "local" regulations exist, the French laws and regulations shall be used
- Company Particular Specifications and data sheet (if any)
- Company General Specifications
- Applicable International Organisation of Standardisation (ISO) Standards
- Applicable International Electro-technical Commission (IEC) Standards
- Applicable CENELEC Standards
- Applicable International Commission on Illumination (CIE) Technical Reports.

Standards

Reference	Title
IEC 60050-845	International Electro-technical Vocabulary (IEV) - Chapter 845: Lighting
IEC 60064	Tungsten filament lamps for domestic and similar general lighting purposes – Performance requirements
IEC 60081	Double-capped fluorescent lamps – Performance specification
IEC 60155	Glow-starters for fluorescent lamps
IEC 60400	Lampholders for tubular fluorescent lamps and starterholders



Reference	Title
IEC 60432 (All parts)	Incandescent lamps- Safety requirements- All parts.
IEC 60529	Degrees of protection provided by enclosures (IP code)
IEC 60598 (All parts)	Luminaires – All parts
IEC 60662	High pressure sodium vapour lamps- Performance specifications
IEC 60921	Ballasts for tubular fluorescent lamps - Performance requirements
IEC 60923	Auxiliaries for lamps - Ballast for discharge lamps (excluding tubular fluorescent lamps) - Performance requirements
IEC 60927	Auxiliaries for lamps - Starting devices (other than glow starters) - Performance requirements
IEC 60929	ACand/or DC- supplied electronic supplied electronic control gear for tubular fluorescent lamps - Performance requirements
IEC 60968	Self-ballasted lamps for general lighting services - Safety requirements
IEC 60969	Self-ballasted lamps for general lighting services - Performance requirements
IEC 61000-3-2	Electromagnetic compatibility (EMC) - Part 3-2: Limits - Limits for harmonic current emissions (equipment input current inferior or equal 16 A per phase)
IEC 61167	Metal halide lamps – Performance specifications
IEC 61231	International lamp coding system (ILCOS)
IEC 61347 (All parts)	Lamp control-gear – All parts
IEC 61547	Equipment for general lighting purposes - EMC immunity requirements
IEC 62035	Discharging lamps (excluding fluorescent lamps) - Safety specification
ISO 3864 (All parts)	Safety colours and safety signs – All parts
EN 1838	Lighting applications - Emergency lighting
EN 12464 (Parts 1; 2)	Light and lighting - Lighting of work places - Parts 1; 2
EN 13032 (All parts)	Light and lighting - Measurement and presentation of photometric data of lamps and luminaires – All parts



Professional Documents

Reference	Title
CIE 97	Maintenance of indoor electric lighting system
CIE 129	Guide for lighting exterior work areas

Regulations

Reference	Title
Not applicable	

Codes

Reference	Title
Not applicable	

Other documents

Reference	Title
Not applicable	

Total General Specifications

Reference	Title
GS EP ELE 079	Electrical apparatus for potentially explosive gas atmospheres
GS EP MED 062	Hygiene in bases and living quarters

3. Definitions

General light and lighting terms are defined in the following standards:

- [IEC 60050-845](#): International Electro-technical Vocabulary (IEV) - Chapter 845: Lighting.

4. Lighting criteria requirements

The lighting system must be designed and implemented according to the following criteria:

- Ambient temperature
- Environmental conditions such as exposure to chemicals or to saltwater
- Type of location: outdoor, indoor, hazardous and safe areas